



KIRKLAND LAKE GOLD

DETOUR LAKE MINE

**Detour Lake Operation
Ontario, Canada
NI 43-101 Technical Report**



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Report Prepared For:
Kirkland Lake Gold Ltd.

Effective Date:
26 July, 2021

CERTIFICATE OF QUALIFIED PERSON

I, Steven Gray, P. Geo. am employed as Exploration Superintendent with Kirkland Lake Gold Ltd, with an street address at Royal Bank Plaza, South Tower 200 Bay Street, Suite 2800 Toronto, Ontario, M5J 2J1 Canada.

This certificate applies to the technical report titled "Detour Lake Operation, Ontario, Canada, NI 43-101 Technical Report" that has an effective date of 26 July, 2021 (the "technical report").

I am a Professional Geologist with the Professional Geoscientists of Ontario, APGO Membership #1580. I graduated from Carleton University (Canada) in 1992 with a bachelor's degree in Geology.

I have practiced my profession for 29 years. I have been directly involved in the planning, execution, and management of the Exploration Program at Detour Lake Mine. My mining and exploration experience includes senior positions with Placer Dome Canada Inc, Hudson Bay Mining and Smelting Inc., Chief Geologist positions with Kirkland Lake Gold Inc, Richmond Mines Inc, and Primero Mining Ltd and Vice President of Exploration for Northern Sphere Mining. I have consulted for numerous exploration and mining companies assisting with projects in Canada and abroad. I have exploration and drill data experience, including supervision, design and execution of drill programs, assay programs and quality assurance and quality control checks on drill and assay data, construction of geological models, and database verification. My mining expertise includes serving as Mine Manager for URSA Major Minerals Inc. and Industrial Minerals Inc., managing the development and extraction of base metal, precious metal, and industrial minerals.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) for those sections of the technical report that I am responsible for preparing.

My most recent site visit was on August 26, 2021.

I am responsible for Sections 1.1, 1.2, 1.5 to 1.8, 1.25; Section 2; Section 6; Section 7; Section 8; Section 9; Section 10; Section 11; Section 12; Sections 25.1, 25.3, 25.4; and Section 27 of the technical report.

I have been involved with the Detour Lake Mine for one year and four months in my role as Exploration Superintendent working out of the Timmins/Kirkland Lake Offices, spending time at site monthly. I also worked onsite for five years, from 1992-1996, serving as an underground mine geologist for Placer Dome Canada.

I have read NI 43-101, and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections 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: 15 October, 2021

"Signed"

Steven Gray, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

I, Andre Leite, P. Eng. am employed as Vice President Technical Services with Kirkland Lake Gold Ltd, with an address at Royal Bank Plaza, South Tower 200 Bay Street, Suite 2800 Toronto, Ontario, M5J 2J1 Canada.

This certificate applies to the technical report titled “Detour Lake Operation, Ontario, Canada, NI 43-101 Technical Report” that has an effective date of 26 July, 2021 (the “technical report”).

I am a Professional Engineer with Professional Engineers Ontario, license number 100153687; a chartered professional member of the Australasian Institute of Mining and Metallurgy (MAusIMM(CP)), member number 301888. I graduated from McGill University (Canada) in 2008 with a Master’s Degree in Mining Engineering and from Universidade Federal de Minas Gerais in 2004 with a Bachelor’s Degree in Mining Engineering.

I have practiced my profession for 17 years. I have been directly involved in the mineral resource modelling for the Detour Main Pit and have reviewed in detail the mineral resource modelling for the North pit, West Detour and 58N deposits. I have also participated in life of mine planning. I have two years of experience as the Detour Lake Mine Technical Service Manager. Prior to that I held the positions of Technical Service Manager Vale Base Metals Asia Pacific, responsible for mineral resource and mineral reserve estimates for Vale Base Metal operations in the region; Principal Mine Engineer Vale Base Metals Global, leading the initiatives associated with corporate governance, technical services and technology and innovation for the Base Metals business with a major focus on their open pit operations; as mineral resource and mineral reserve specialist with the Inco (later Vale) Mineral Resources and Mineral Reserves team supporting all operations globally with mineral resource modelling, mine design, mine production planning and mineral reserve definition.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101) for those sections of the technical report that I am responsible for preparing.

My most recent site visit was on September 13, 2021.

I am responsible for Sections 1.1 to 1.4, 1.8, 1.10.1, 1.10.3, 1.11 to 1.14, 1.16, 1.18, 1.23 to 1.25; Section 2; Section 3; Section 4; Section 5; Section 12; Sections 14.1, 14.2, 14.4 to 14.7; Section 15; Section 16; Section 18; Section 19; Section 23; Section 24; Sections 25.1, 25.2, 25.6 to 25.8, 25.10, 25.12, 25.16, 25.17; Sections 26.1, 26.2, Section 27, and Appendix A of the technical report.

I am not independent of Kirkland Lake Gold as independence is described in Section 1.5 of NI 43–101.

I have been involved with the Detour Lake Mine for two years in my role as a Technical Service Manager working at site. I have previously co-authored a technical report on the Detour Lake Operation:

- Leite, A., Dupont, J.F., Raizman, V., and Fournier, P.A., 2020: Detour Lake Operations, Ontario, Canada, NI 43-101 Technical Report: technical report prepared for Kirkland Lake Gold, effective date 30 December, 2020.

I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections 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: 15 October, 2021

“Signed”

Andre Leite, P.Eng.



KIRKLAND LAKE GOLD

DETOUR LAKE MINE

CERTIFICATE OF QUALIFIED PERSON

I, Juan Figueroa, P.Geo., am employed as the Manager, Mineral Resource with Kirkland Lake Gold Ltd, with a street address at 115 Jubilee Ave., East, Timmins, Ontario, P4N 5W4, Canada.

This certificate applies to the technical report titled "Detour Lake Operation, Ontario, Canada, NI 43-101 Technical Report" that has an effective date of 26 July, 2021 (the "technical report").

I am a member in good standing of the Professional Geoscientists of Ontario (PGO licence No. 2200). I graduated from Laurentian University (Canada) in 1995 with a Master's Degree in Science and from Universidad Central del Ecuador in 1988 with a Bachelor's Degree in Engineering Geology.

I have practiced my profession continuously as a geologist for 32 years and I have worked as a Resource Geologist for 12 years being employed as a Senior Resource Geologist by Lake Shore Gold, Primero Mining, Tahoe Resources, and Pan American Silver. I have experience with various mineral deposit types, Mineral Resource estimation techniques, and the preparation of technical reports. I have been directly involved with the modeling of geology and mineral resource domains for the Saddle and West Detour Areas and have reviewed in detail the mineral resource estimation for the Saddle and West Detour deposits.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) for those sections of the technical report that I am responsible for preparing.

My most recent site visit was from July 21-23, 2020.

I am responsible for Sections 1.1, 1.2, 1.8, 1.10.2, 1.10.3, 1.11, 1.25; Sections 2.1 to 2.6; Sections 14.1, 14.3 to 14.7; and Sections 25.1, 25.6, 25.16; and Section 27 of the technical report.

I am not independent of Kirkland Lake Gold as independence is described in Section 1.5 of NI 43-101.

I have been directly involved with Detour Lake Mine for 16 months in my role as Manager of Mineral Resources.

I have read NI 43-101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections 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: 15 October, 2021

"Signed"

Juan Figueroa, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

I, Jean-Francois Dupont (P. Eng., OIQ) am employed as the Detour Lake Mine Chief Metallurgist with Kirkland Lake Gold Ltd, with an address at 1B First Avenue, Cochrane, Ontario.

This certificate applies to the technical report titled “Detour Lake Operation, Ontario, Canada, NI 43-101 Technical Report” that has an effective date of 26 July, 2021 (the “technical report”).

I am a Professional Engineer, member of L’Ordre Des Ingénieurs du Québec, license number 117145. I graduated from Laval University (Canada) in 1996 with a Bachelor’s Degree in Mining Engineering, majoring in mineral processing.

I have practiced my profession for 24 years. I joined Detour Gold Corporation, a predecessor company to Kirkland Lake Gold Ltd. in 2011 and was directly involved in the engineering, construction and commissioning of the Detour Lake Mine processing plant. I have worked in the Detour Lake Mine processing plant for eight years. I have also participated in the elaboration of life-of-mine plans. Prior to that, I held various positions with Barrick Gold for 14 years including five years at the Corporate office as Comminution Metallurgist. This position gave me exposure to the 19 processing plants Barrick Gold had at the time.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101) for those sections of the technical report that I am responsible for preparing.

I am directly employed at the Detour Operation, and have been since 2011. This familiarity with the operations serves as my personal inspection for the purposes of the technical report.

I am responsible for Sections 1.1, 1.2, 1.9, 1.15; Sections 2.1 to 2.4, 2.6; Section 13; Section 17; Sections 25.1, 25.5, 25.9; and Section 27 of the technical report.

I am not independent of Kirkland Lake Gold Ltd, as independence is described by Section 1.5 of NI 43–101.

I have been involved with the Detour Operation since 2011 during engineering, construction, commissioning, and operations of the process plant. I have previously co-authored a technical report on the Detour Lake Operation:

- Leite, A., Dupont, J.F., Raizman, V., and Fournier, P.A., 2020: Detour Lake Operations, Ontario, Canada, NI 43-101 Technical Report: technical report prepared for Kirkland Lake Gold, effective date 30 December, 2020.

I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections 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: 15 October, 2021

“Signed”

J-F Dupont, P. Eng (OIQ)



CERTIFICATE OF QUALIFIED PERSON

I, Veronika Raizman, P. Geo. am employed as a Manager for Reclamation and Geochemistry, with Kirkland Lake Gold Inc., with an address at Royal Bank Plaza, South Tower 200 Bay Street, Suite 2800 Toronto, Ontario, M5J 2J1 Canada.

This certificate applies to the technical report titled "Detour Lake Operation, Ontario, Canada, NI 43-101 Technical Report" that has an effective date of 26 July, 2021 (the "technical report").

I am a Professional Geoscientist registered with the Professional Geoscientists of Ontario (Membership #2563). I graduated from the University of Toronto with a Ph.D. in Earth Sciences (2015), a M.Sc. in Geology (2011), and a H.B.Sc. in Environmental and Physical Geography (2010).

I have practiced my profession for 10 years. Prior to joining the Detour Lake Mine in 2016, I served as a geochemist with SRK Consulting Ltd., where I gained experience in the prediction and management of acid rock drainage and metal leaching during all phases of the mining cycle, as well as mine waste characterization using static, kinetic, and field testing programs. At the Detour Lake Mine, I have previously served in multiple roles, including Environmental Specialist; Geochemistry, Research and Closure Coordinator; and Senior Advisor for Mine Closure Planning and Geochemistry. My duties have supported, but not been limited to, 1) environmental permitting, reporting and compliance, including Indigenous consultation; 2) management of geochemical monitoring programs, including water quality (i.e. effluent and receiving environment) and mine wastes (i.e. waste rock and tailings); and 3) planning and execution of progressive reclamation and mine closure activities.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) for those sections of the technical report that I am responsible for preparing.

I have worked at Detour Lake mine site, and this familiarity with the operation serves as my personal inspection.

I am responsible for Sections 1.1, 1.2, 1.17; Sections 2.1 to 2.4, 2.6; Section 20; Sections 25.1, 25.11; and Section 27 of the technical report.

I am not independent of Kirkland Lake Gold as independence is described in Section 1.5 of NI 43-101.

I was based at the Detour Lake Mine for four years and five months, followed by my current role as Manager for Reclamation and Geochemistry at the Kirkland Lake Gold Inc. Toronto corporate office, where I have served for a year. I have previously co-authored a technical report on the Detour Lake Operation:

- Leite, A., Dupont, J.F., Raizman, V., and Fournier, P.A., 2020: Detour Lake Operations, Ontario, Canada, NI 43-101 Technical Report: technical report prepared for Kirkland Lake Gold, effective date 30 December, 2020.

I have read NI 43-101, and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.



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As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections 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: 15 October, 2021

“Signed”

Veronika Raizman, P.Geol.

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CERTIFICATE OF QUALIFIED PERSON

I, Paul Andrew Fournier, P.Eng., am employed as a Manager, Cost Accounting at the Corporate Office of Kirkland Lake Gold Ltd, with an address at Royal Bank Plaza, South Tower 200 Bay Street, Suite 2800 Toronto, Ontario, M5J 2J1, Canada.

This certificate applies to the technical report titled "Detour Lake Operation NI 43-101 Technical Report" that has an effective date of 26 July, 2021 (the "technical report").

I am a Professional Engineer with Professional Engineers Ontario, license number 100218548. I graduated from McGill University (Canada) in 2011 with a Bachelor of Materials Engineering degree. I passed the Level III Exam of the CFA® Program of the CFA Institute in 2021.

I have practiced my profession since graduation. I have seven years of experience in process and metallurgical engineering in mining and metals, including four years with the processing plant at the Detour Lake Mine. This experience includes five years of metals accounting, cost estimation, production and economic forecasting. I have two years of experience in financial analysis specifically for the Detour Lake Mine. As part of my role with Kirkland Lake Gold Ltd, I prepared the financial model for the Detour Lake Mine consolidated budget for 2020 and 2021. I have intimate knowledge of the cost model for the Detour Lake Mine through experience in budgeting, forecasting, monthly reporting, and variance analysis.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) for those sections of the technical report that I am responsible for preparing.

My latest personal inspection of the Detour Lake Mine property was a 14-day rotation from July 2-15, 2020.

I am responsible for Sections 1.1, 1.2, 1.19, 1.20, 1.21, 1.22, 1.23; Sections 2.1 to 2.6; Section 21, Section 22, Sections 25.1, 25.13, 25.14, 25.15, 25.17, and Section 27 of the technical report.

I am not independent of Kirkland Lake Gold Ltd as I am currently employed as Manager, Cost Accounting.

I have been involved with the Detour Gold Mine since 2014, first with the process plant, and then as a financial analyst.

I have read NI 43-101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections 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: 15 October, 2021

"Signed"

Paul Andrew Fournier, P.Eng.

Cautionary Statements

Cautionary Notes

Forward-Looking Information

This Technical Report contains certain forward-looking information and forward-looking statements, as defined in applicable securities laws (collectively referred to herein as “forward-looking statements”). Forward-looking statements reflect current expectations or beliefs regarding future events or Kirkland Lake Gold Ltd.’s (Kirkland Lake Gold or the Company) future performance. All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “continues”, “forecasts”, “projects”, “predicts”, “intends”, “anticipates”, “targets”, or “believes”, or variations of, or the negatives of, such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “should”, “might” or “will” be taken, occur or be achieved.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may 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, discrepancies related to the impact of various capital projects and the anticipated benefits therein, required capital investments; estimates of net present value and internal rate of returns; the accuracy of Mineral Reserve and Mineral Resource estimates, production estimates and capital and operating cost estimates and the assumptions on which such estimates are based; market competition; ongoing relations with employees and impacted communities changes in costs (including labour, 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 forward-looking 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 U.S. 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.

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 and the Qualified Persons who authored the Technical 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 certain non-IFRS measures in this document. 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.

Free Cash Flow Before & After Tax

In the gold mining industry, free cash flow is a common performance measure with no standardized meaning. Kirkland Lake Gold calculated free cash flow before taxes by deducting site operating costs, royalties and first nations payments, changes in inventory, capital expenditures, reclamation expenditures, and lease payments from net revenues and changes in working capital. Free cash flow after taxes is calculated by deducting tax expenses from free cash flow before taxes.

Kirkland Lake Gold discloses free cash flow before and after tax as it believes the measure provides valuable assistance to investors and analysts in evaluating the Company's ability to generate cash flow after capital investments and build the cash resources of the Company. The most directly comparable measure prepared in accordance with IFRS is net cash provided by operating activities less net cash used in investing activities.

Operating Unit Costs

Kirkland Lake Gold reports the following operating unit costs:

- Mining operating unit cost (C\$/t ex-pit): calculated as mining operating costs excluding adjustment for deferred stripping divided by total tonnes mined (ore + waste).
- Operating unit cost per tonne (C\$/t milled): calculated as operating costs divided by total tonnes milled. This is calculated for the different components of operating cost. Operating costs include mine site operating costs such as mining, processing, and site administration, as well as adjustments for deferred stripping, royalties, and changes in inventory.

- *Operating unit cost per ounce (C\$/t oz sold): calculated as operating costs per ounce on a gross gold sales basis, where gross gold sales represent gold production after adjustment for changes in gold-in-circuit and dore inventory.*

Kirkland Lake Gold discloses operating costs and operating unit cost per tonne and per ounce 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 ounce of gold should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS.

Operating Margin

The operating margin represents net revenue after site operating costs, royalties and First Nations payments, and changes in inventory. Operating margin 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.

Operating Cash Costs and Operating Cash Costs per 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 cost per ounce sold is based on ounces sold and is calculated by dividing operating cash costs by volume of gold ounces sold.

Kirkland Lake Gold discloses operating cash costs and operating cash cost per tonne and per ounce 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 ounce of gold should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS.

AISC and AISC per Ounce Sold

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

The Company defines AISC as the sum of operating costs (as defined and calculated above), royalty expenses, sustaining capital, corporate expenses and reclamation cost accretion related to current operations. Corporate expenses include general and administrative expenses, net of transaction related costs, severance expenses for management changes and interest income. AISC excludes growth capital expenditures,



growth exploration expenditures, reclamation cost accretion not related to current operations, interest expense, debt repayment and taxes.

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. Both measurements are used by management to assess the effectiveness of investment programs.

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 accounts payables from accounts receivables, supplies inventory, and gold inventory (ore stockpiles, gold-in-circuit, and dore inventory). 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 Kirkland Lake Gold's liquidity.

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Appendix A: Mineral Claims List and Mineral Claims Location Plans

1.0 Summary

1.1 Introduction

Mr. Steve Gray, Mr. Andre Leite, Mr. Juan Figueroa, Mr. Jean-Francois Dupont, Dr. Veronika Raizman, and Mr. Paul Andrew Fournier prepared a NI 43-101 Technical Report (the Report) on the Detour Lake Operations (the Detour Lake Operations, Detour Lake Mine, or the Project) for Kirkland Lake Gold Ltd (Kirkland Lake Gold). The Detour Lake Operations are located in in northeastern Ontario.

The Detour Lake Operations consist of the operating Detour Lake Main Pit, and planned open pit operations at the West Detour and North Pits. Mineral Resources are estimated for the Detour Lake, West Detour, North Pit and Zone 58N areas. Mineral Reserves are estimated for the Detour Lake, West Detour and North Pit areas.

1.2 Terms of Reference

The Report supports disclosure in the news release dated 2 September, 2021, entitled “Kirkland Lake Gold Announces 10.1 Million Ounce Increase in Measured and Indicated Mineral Resources at Detour Lake Mine”.

Units used in the report are metric units unless otherwise noted. Monetary units are in Canadian dollars (C\$) unless otherwise stated. All ounce units refer to troy ounces. The Report uses Canadian English. Mineral Resources are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014; the 2014 CIM Definition Standards). The Detour Lake deposit and open pit can also be referred to as the Detour Main deposit and open pit.

1.3 Property Description and Location

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

The climate in the Project area is characterized by cold winters and mild summers. The average total annual precipitation is estimated at 862 mm with approximately 30% falling as snow, and the greatest precipitation contribution occurring as rain during June through October. The predominant wind direction is from the west. Mining and exploration activities are conducted year-round.

Site topography is subdued with maximum local relief of approximately 30 m. The elevation ranges from approximately 260–288 metres above sea level. Areas of higher relief are sparsely wooded with jack pine, black and white spruce, balsam fir, trembling aspen, and white birch. Areas that are slightly lower in relief are poorly drained and characterized by muskeg. There is very little bedrock outcrop and much of the Project area is overlain by thick accumulations of glacial material that includes till and glaciofluvial material (poorly sorted sand with lenses of gravel).

Numerous small streams linking elliptical lakes and ponds, generally oriented parallel to the pattern of glacial fluting. Many small and shallow lakes are found within the Project area, the largest being Sunday Lake.

1.4 Mineral Tenure, Surface Rights, Water Rights and Royalties

On January 31, 2020, Kirkland Lake Gold completed the acquisition of Detour Gold Corporation (Detour Gold) and Detour Gold became a wholly-owned subsidiary of Kirkland Lake Gold. On January 2, 2021, Detour Gold was amalgamated with Kirkland Lake Gold Inc., a wholly-owned subsidiary of Kirkland Lake Gold, and the amalgamated entity was renamed Kirkland Lake Gold Inc.

The 646 km² Project area forms one contiguous group of mining patents, mining leases and cell mining claims in the District of Cochrane, Ontario, with a small group of cell claims in Massicotte Township, Québec. The mineral tenure in Ontario consists of

- 2,213 cell mining claims: 39,714 ha;
- 44 lease documents: 23,712 ha;
- 6 patent documents: 602 ha.

There are an additional 20 claims covering 549 ha in Quebec.

The patented parcels of land are the most secure form of land tenure and are subject to an annual mining tax payable to the Crown. The patented lands are described by the legal survey of individual mining claims and surveyed mining locations. The leasehold mining lands consist of 21-year mining leases issued for mining claims that were legally surveyed as individual mining claims or defined by the perimeter survey of groups of mining claims. The *Mining Act* (Ontario) contains provisions for the renewal of 21-year mining leases. Applications for renewal are subject to review and consent by the Ministry of Energy, Northern Development and Mines (ENDM), now renamed to Ministry of Northern Development Mines, Natural Resources and Forestry (NDMNRF). Upon registering cell mining claims (cells) in Ontario, Kirkland Lake Gold must perform and file exploration assessment work and apply on those cells assessment work credits to maintain them in good standing. The first unit of assessment work of \$400 per 20 ha is required by the second anniversary date of the recording of the cell and an additional unit is required to be performed and filed for each year thereafter. A claim in Québec provides the stakeholder with a two-year right to explore within the claim holdings for any mineral substance with exceptions. After the initial two-year period claims can be renewed for an additional two-



year term on certain conditions including that sufficient assessment work is performed on the claims or payment is made in lieu.

Kirkland Lake Gold has 30 leases and 10 patents totaling 18,574.442 ha of surface rights on the Detour Lake Project. The surface rights are sufficient for all surface infrastructure and mine operation.

Kirkland Lake Gold does not exclusively hold water rights in the region. As part of the ongoing environmental compliance Kirkland Lake Gold is required to capture all site runoff from stockpiles and the open pits. Water taking from groundwater and freshwater sources is regulated by the Ontario Ministry of Environment, Conservation and Parks (MECP) via Permits to Take Water (PTTW). The Detour Lake Mine has a number of active PTTW, which are renewed at the required regulatory frequency in order to support activities over the life-of-mine (LOM). Since this water is required to be captured it puts the site water balance in a surplus over the LOM, providing sufficient water to be used for processing in the mill, with the excess being discharged to the environment under the permitted discharge conditions for the operations.

Certain of the claims are subject to a 2% royalty payable to Franco-Nevada Corporation. This royalty is included in the cash flow analysis. Other claims are subject to royalties to third-parties but these claims do not fall within the area of the estimated Mineral Resources and Mineral Reserves. Kirkland Lake Gold has certain payments to First Nations groups in the area of the estimated Mineral Resources and Mineral Reserves; these payments are included in the economic analysis. The Detour Lake Operations are not subject to any other back-in rights payments, agreements or encumbrances.

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

Current exploration liabilities consist with respect to the environment primarily consist of the potential for fuel and lubricant spills and the risk of fire during the drier months resulting from heavy equipment.

1.5 Geology and Mineralization

The Detour Lake and West Detour deposits are considered to be examples of orogenic greenstone-hosted hydrothermal lode gold deposits.

The Project is located within the northwestern portion of the Abitibi Greenstone Belt that consists of east–west-trending synclines of felsic to ultramafic volcanic rocks. Intervening domes are cored by syn-volcanic tonalite and gabbrodiorite rocks and alternate with east–west-trending bands of late tectonic turbiditic and conglomeratic sedimentary rocks. Most of the volcanic and sedimentary strata dip vertically and are commonly bound by abrupt, east–west-trending faults with varied dips.

In the Project area, the greenstone–granite architecture is partially aligned and disrupted along a linear, east–west-trending belt that defines the position of the Sunday Lake Deformation Zone. Supracrustal rocks within the Project area consist of a thick sequence



of mafic to ultramafic lithologies, which are predominantly volcanic in origin, and are part of the Deloro assemblage. They occur within regional synclinal–anticlinal fold structures traced for over 30 km across the Project and are in structural contact to the south with the younger sediments of the Caopatina assemblage. These rocks are bounded to the north and west by the Opatica basement gneissic rocks. To the east and south, the Deloro assemblage is intruded by several large, weakly foliated granodioritic to tonalitic intrusions which are intersected by numerous local felsic to mafic dykes, sills and younger regional Proterozoic diabase dykes.

There are two recognized episodes of gold mineralization at the Detour Lake and West Detour deposits.

The first episode consists of a wide and generally auriferous sulphide-poor quartz vein stockwork formed in the hanging wall of the Sunday Lake Deformation Zone. The sulphide-poor quartz vein stockworks observed in the hanging wall have sub-vertical north or south dips and are parallel to a series of east-west trending high strain zones. These veins form a weak stockwork and are boudinaged and/or folded.

The second episode is a stage of gold mineralization overprinting the early auriferous stockwork, principally in the hanging wall of the Sunday Lake Deformation Zone, with a higher sulphide content. The sulphide-rich gold mineralization predominantly fills structural sites in deformed quartz veins, fractures and veins crosscutting the foliation fabric but also in pillow breccias and selvages. The distribution of sulphide-rich mineralization is strongly controlled by the geometry of kinematic orientation.

The major structural feature is the 30 km-long Sunday Lake Deformation Zone, an east–west-trending, steeply north-dipping deformation corridor. A regional east–west trending structure, the Massicotte Deformation Zone is recognized several kilometres to the south of the Sunday Lake Deformation Zone and extends for over 30 km in strike length. It marks the southern contact between the Caopatina assemblage sedimentary rocks and the underlying Deloro assemblage volcanic rocks. The third major structure is the Lower Detour Deformation Zone, a 30 km long, east–west-trending, and steeply south-dipping one that separates Caopatina assemblage sedimentary rocks and the underlying Deloro assemblage volcanic rocks. The youngest structures are a series of 120–145° trending faults, which are locally intruded by Proterozoic-age diabase dykes. Two east-trending synform–antiform pairs are developed in the volcanic assemblage, the North Walter Lake Synform and the Airstrip Antiform.

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

The West Detour deposit has a strike extent of 3.1 km, a width of 2.2 km, and an approximate elevation range of 1 km. Generally, the gold zones occur in a variety of structural settings and several rock types including massive to pillowed tholeiitic basalt flows, variably deformed-altered basaltic to peridotitic komatiite units, cherty tuffs, gabbro and deformed felsic to intermediate dykes. Mineralized lenses vary from 5–50 m in true width. Gold is associated with pyrite, pyrrhotite, and rarely chalcopyrite.

The Zone 58N deposit has an east–west strike length of 450 m, extends from surface to a depth of 800 m, and the mineralized system remains open at depth. Gold mineralization in Zone 58N is within the southern portion of a feldspar porphyry intrusion, and hosted by a swarm of plagioclase-phyric tonalitic dykes that intrude mafic rocks of the Deloro assemblage. Gold is found within and at the margins of quartz \pm tourmaline \pm carbonate stockwork-type veins that infill areas of brittle deformation. Visible gold occurs in nearly every drill hole that intersects mineralization and is also present as micro-inclusions within pyrite grains, or intergrown with bismuth-tellurides.

Exploration potential remains in the area where Mineral Resources are estimated. The Main and Quartz Hangingwall Zones in the Detour Lake deposit remain open at depth. The West Detour mineralization has potential be extended both to the west and at depth. The North Pit also has potential for depth and along strike extension, as does the 58N Zone and Zone 75.

1.6 History

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

Since acquisition of the Detour Gold Operations, Kirkland Lake Gold has completed additional exploration drilling, Mineral Resource and Mineral Reserve estimates, updated the mining method and mine planning, migrated data to a new Fusion database, expanded or is in the process of constructing selected infrastructure (core storage, accommodations camp, an airfield and aerodrome, onsite assay laboratory, additional mobile maintenance offices and shops) and continued with permitting of the West Detour project.

1.7 Drilling and Sampling

Core drilling completed on the Project (including 58N) within the database totals 8,384 drill holes (1,884,240.3 m) including 17 wedge holes.

Drilling and assaying that supports the Mineral Resource estimate for the Detour Lake deposit was completed by Placer Dome, Tradewinds, Pelangio, and Detour Gold from 1974–2016. Within the immediate area of the Mineral Resource estimate, there are a total of 6,519 core drill holes (1,128,965.7).

Drilling and assaying that supports the Mineral Resource estimate for the West Detour deposit was completed from 1996–2021 by Placer Dome, Tradewinds, Pelangio, Detour Gold and Kirkland Lake Gold. Within the immediate area of the Mineral Resource estimate, there are a total of 1,049 core drill holes (381,403.7 m).

Drilling and assaying that supports the Mineral Resource estimate for the North Pit deposit was completed from 2004–2016 by Tradewinds, Pelangio Metals, and Detour Gold. Placer Dome completed one drill hole in the area drilled in the 1990s. Within the immediate area of the Mineral Resource estimate, there are a total of 101 core drill holes (21,945.6 m).

Drilling and assaying that supports the Mineral Resource estimate for the Zone 58N deposit was completed by Detour Gold from 2012–2017. Within the immediate area of the Mineral Resource estimate, there are a total of 370 core drill holes (138,433 m).

Core drilling from surface included the following core size diameters: AQ (27 mm), BQ (36.4 mm) and NQ (47.6 mm). Core drilling from underground included the following core size diameters: EX (21 mm), AQ (27 mm), BQ (36.4 mm), BQTK (45 mm) and NQ (47.6 mm).

Geological and geotechnical logging has evolved over the various exploration and mining campaigns. Standard procedures for logging during the legacy (pre-Trade Winds) campaigns were not well documented and varied considerably between programs. Trade Winds used the same pre-set terminology and codes as the Placer Dome programs. Detour Gold developed a geological legend for the Project area incorporating advances in understanding of the regional and local geology, and the deposit-scale geology, structure, alteration and mineralization. Kirkland Lake Gold generally uses the Detour Gold logging lithology legend and codes.

Surface collar surveys include a mix of measurements from cut grids, and differential global positioning system (DGPS) instruments. The initial position and azimuth of most underground holes was typically determined using measurements from underground survey stations and reference points.

Down-hole surveys have used acid tests, and Tropari, Sperry Sun, Flexit SmartTool, Reflex EZ-Shot, Reflex Maxibor II, and Reflex Gyro Sprint-IQ instruments. Depending on the campaign and instrumentation being used, survey data could be collected at 3–75 m intervals downhole.

In general, core recovery exceeded 95% with losses generally occurring within overburden, the first few metres of bedrock, or when going through a fault zone.

Grade control drilling uses RC methods; these drill holes do not support Mineral Resource estimation.

Core was typically split for sampling, with one half sent for assay and the other half retained as a reference. A small percentage of the core drilled during Kirkland Lake Gold's ownership was not sawn and was shipped as whole core samples. Sample intervals ranged from 0.3–1.5 m.

Bulk density determinations for the Detour Lake deposit initially used an average derived from the historical mining operations. Kirkland Lake Gold reviewed available bulk density values, and for the current Mineral Resource estimate, a density value was determined for each assigned lithology code by constructing histograms and removing outliers and determining the average for each lithology. The density value of 2.9 t/m³ is supported by 7,045 determinations completed by Detour Lake and Pelangio. Lithologies without a bulk density were assigned an average density of 2.99 t/m³. The resource estimate uses an average value of 2.90 t/m³ for the West Detour deposit, based on 2,742 determinations that were completed by Kirkland Lake Gold in 2021. The Zone 58N estimate uses an average value of 2.8 t/m³, based on 2,644 measurements by Detour Gold.

A number of laboratories were used over the Project history. Where known, the laboratories used during the legacy programs included Assayers Limited, in Rouyn, Quebec, (Assayers); the Dome Mine Laboratory in Timmins (Dome laboratory), Ontario; Swastika Laboratories Ltd, in Swastika, Ontario (Swastika); the Detour Lake Mine assay laboratory (Detour Lake laboratory); X-Ral Laboratories in Rouyn, Quebec (X-Ral); Bondar Clegg in Ottawa, Ontario (Bondar Clegg); Chemex Laboratories in Mississauga, Ontario (Chemex Mississauga); Chemex Laboratories in Rouyn, Quebec (Chemex Rouyn); Accurassay Laboratories in Thunder Bay, Ontario (Accurassay Thunder Bay); and Activation Laboratories Ltd in Timmins, Ontario (Actlabs). Accreditations at the time the work was performed is not known. All laboratories other than the Dome laboratory and the Detour Lake laboratory were independent of the operators at the time. All laboratories were independent of Kirkland Lake Gold. Trade Winds and Detour Gold used SGS Minerals in Garson, Ontario (SGS Garson), SGS Minerals in Don Mills, Ontario (SGS Don Mills), Accurassay in Timmins, Ontario (Accurassay Timmins), Accurassay in Thunder Bay, Ontario (Accurassay Thunder Bay), ALS Minerals in Sudbury, Ontario (ALS Sudbury), and ALS Minerals in Vancouver, B.C. (ALS Vancouver). Where known, the laboratories held ISO17025 accreditation for selected analytical techniques. The laboratories were independent of Trade Winds and Detour Gold and are independent of Kirkland Lake Gold. In 2020–2021, Kirkland Lake Gold used ALS Minerals, with sample preparation completed at ALS Timmins and analysis at ALS Vancouver. Exploration samples were also submitted to Actlabs, SGS Laboratories in Cochrane (SGS Cochrane), and AGAT Laboratories in Mississauga (AGAT). These laboratories conducted both sample preparation and analysis. The laboratories hold

ISO17025 accreditation for selected analytical techniques. The laboratories are independent of Kirkland Lake Gold.

Grade control samples are analysed at SGS Cochrane and Actlabs. The laboratories currently hold ISO17025 accreditation for selected analytical techniques. The laboratories were independent of Detour Gold and are independent of Kirkland Lake Gold.

Sample preparation and analysis protocols varied during the legacy programs. Samples were typically crushed, ground or pulverized, and assayed using either fire assay of a one-assay-ton sub-sample, an aqua regia digestion and ketone extraction method, atomic absorption (AA) or a pulp and metallica procedure. During the Detour Gold programs, samples were crushed, pulverized, and analyzed using either fire assaying with atomic absorption spectroscopy (AAS) finish, an inductively-coupled plasma–atomic emission spectroscopy (ICP–AES) finish, a gravimetric finish, metallic screen procedures, or an inductively-coupled plasma–optical emission spectrometry (ICP–OES) finish. During the Kirkland Lake Gold programs, samples were crushed, pulverized, and analyzed using AAS and samples >10 g/t analyzed with a gravimetric finish. Selected high-grade samples are analyzed using a screen metallica procedure.

Grade control samples are crushed, pulverized and assayed using assay with an ICP–OES finish. Sulphur and carbon analysis are done on 14 m composites (equivalent to one bench) using LECO.

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

Kirkland Lake Gold migrated the Detour Gold Access databases to a Fusion database. Kirkland Lake Gold performed a major data verification exercise during the data migration process. Verification procedures included the review and modifications of coordinates, surveys, samples, lithologies, alteration, mineralization, deformation, structure, veining, and rock quality designation (RQD) data. Currently, logging and geotechnical data are directly uploaded from the logging software. Collar survey data are uploaded from a (DGPS) Topcon GR3 instrument with a Nikon total station instrument. The Universal Transverse Mercator (UTM), 1983 North American Datum (NAD83) system was used to record position data. Downhole survey data are uploaded from a REFLEX GYRO SPRINT-IQ™ The Universal Transverse Mercator (UTM), 1983 North American Datum (NAD83) system was used to record position data. All data are checked using inbuilt software checking routines.

Sample security was managed by exploration staff from the drilling phase through to core processing and subsequent dispatching by contracted couriers directly to the analytical facilities. Sample collection was systematically monitored from the drill rigs to the core facility and storage area which is turn is security monitored gated on-site preparation facility.

Chain-of-custody procedures consist of sample submittal forms to be sent to the laboratory with sample shipments to ensure that all samples are received by the laboratory.

1.8 Data Verification

A number of data verification programs for Detour Lake and the West Detour project deposits were carried out by independent consultants and Detour Gold personnel over time.

Kirkland Lake Gold personnel re-verified the entire database during migration of the data from the three Access databases used by Detour Gold to the current Fusion database.

Verification programs completed by Kirkland Lake Gold include daily sample dispatch review and reporting, review and approval of drill logs prior to uploading into the Fusion database, and review and authorization of received assay data by the Senior Database Administrator and the QP prior to uploading into the Fusion database. Other checks completed by the QP include site visits, review of geological data collection and checks that the QA/QC procedures used by Kirkland Lake Gold are consistent with standard industry practices.

A complete verification and validation of analytical, geological, and survey information was completed for the data supporting this Report from January 2020 to July 26, 2021.

Positive production reconciliation since the start of the mining operations at Detour Lake validates the assumptions of metal content and gold extraction. The QP considers that a reasonable level of verification has been completed and that no material issues have been left unidentified from the programs undertaken. The data are acceptable to be used in Mineral Resource and Mineral Reserve estimation.

1.9 Metallurgical Testwork

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

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

Since those studies, extensive plant testwork has proved the benefit of leaching with high oxygen rates and lead nitrate. Three full grinding circuit surveys were completed by Detour

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

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

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

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

Copper is an element that impact cyanide and SO₂ consumption. It is managed by blending if too high and controlling slurry temperature to leach feed. To avoid the copper plating on the carbon, a control strategy on the cyanide/copper ratio is in place.

1.10 Mineral Resource Estimates

Mineral Resources are estimated for the Detour Lake, West Detour, North Pit and Zone 58N areas. There are two separate geological models for the West Detour deposit.

1.10.1 Models Supporting Mineral Reserve Estimates

The models that support the Mineral Reserve estimates have a boundary between the West Detour and Detour Lake models at section line 16,995 E.

The geological model for Detour Lake consists of 3D wireframes built by Kirkland Lake Gold in 2020. The geological model for the West Detour deposit consists of 3D wireframes built in 2013 by Detour Gold and Thon Consulting. The geological model for the North Pit is based on interpreted mineralized zone (domain) established using an Indicator Kriging (IK) interpolation of gold grades using at an indicator cut-off grade of 0.2 g/t Au and a 0.4 cut-off probability to be above the grade cut-off built by P. Daigle Consulting Services in 2016. The geological model for 58N consists of 3D wireframes built in 2018 by G Mining Services Inc.

Drill hole spacing across the Detour Lake deposit is generally on the order of 40 m in the north–south and east–west directions. A block size of 10 x 10 x 7.5 m was selected to accommodate the drill hole spacing and width of the mineralization. Drill hole spacing across the West Detour deposit is generally on the order of 40 m in the north–south and east–west directions. A block size of 10 x 5 x 6 m was selected to accommodate the drill hole spacing and width of the mineralization. The West Detour deposit has narrower mineralized zones and the model was built at 6 m heights, offering the possibility of regularizing (combining) two blocks into a 12-m bench, or selecting 6-m benches. Mineral Resource reporting is done on the combined 12-m block size. A block size of 6 x 3 x 6 m was selected to model the North Pit deposit in order to capture the width of mineralization and planned higher mine selectivity. The Zone 58N model was created to encompass all the known mineralization drilled at Zone 58N, and block sizes were decided based on a typical underground mining scenario (3 m minimum width). Due to the often narrow nature of mineralization, a percentage block model was adopted in Geovia GEMS, and subsequently converted to a sub-blocked model for mine planning purposes.

Three main broad mineralized domains (MZ1, spatially associated with the chert marker horizon; MZ2, associated with the historic Quartz Hangingwall mineralized zone; and MZ3, encompasses widespread disseminated mineralization to the north of MZ2) were defined, with a fourth zone (MX4) containing all data that were not part of the three mineralized domains. Nine domains were constructed for West Detour, by interpreting limits of mineralization on sections that corresponded to broad mineralized zones with higher than usual concentration of samples with potentially economic gold grades. Domain 1 at West Detour corresponds to the chert marker horizon geological unit. All the other mineralized domains were built around Domain 1. Three geological domains were created for the North Pit, together with a gold grade envelope that used a cut-off grade of 0.20 g/t Au. Nine domains were modelled for Zone 58N, based on alteration intensities described as moderate or stronger, plus an additional zone of mineralization present in the hanging wall.

A 3D model of all prior mined areas in the Detour Lake area was created from available plans and sections. Individual models were created for underground access, stopes, and the Campbell open pit. Volume reconciliation versus prior mining records showed that the majority of underground openings are accounted for. This model was used to deplete the block model.

For Detour Lake, samples for grade estimation were first composited to 1 m, separated by mineral zones, capped, and then composited into 5 m down-hole intervals. Composites for

the West Detour deposit were created on 5 m capped grade down-hole intervals. The North Pit dataset was composited on 3 m down-hole intervals. A composite length of 2 m was selected for Zone 58N, which resulted in a minimum of two composites per drill hole (applying a 4 m minimum downhole thickness rule) per domain.

Grade capping was applied based on a reconciliation study for Detour Lake, and on examination of probability plots for West Detour, North Pit and Zone 58N.

Spatial continuity of the composite grades within each deposit was assessed using variography and correlograms.

At Detour Lake, average length weighted densities were determined for these different lithologies. The average density for each lithology was then assigned to the global drillhole database. Intervals without a density value were assigned a value based on a similar lithology and indeterminate intervals were assigned an average density of 2.99 t/m³. A density of 2.9 t/m³ in rock and 1.8 t/m³ in overburden and backfill was used for tonnage determination in the West Detour and North Pit models. The Zone 58N deposit used a density of 2.7 t/m³, derived from drill core measurements.

The interpolation of the Detour Lake resource model was completed using ordinary kriging (OK). An inverse distance weighting to the second power (ID2) interpolation, an ID3, and nearest neighbour (NN) estimates were completed concurrent to the OK estimate for validation purposes. Density was estimated using an ID3 method and used the gold search parameters. The interpolation of the West Detour deposit resource model was completed using OK. The North Pit deposit block model was estimated using OK interpolation method on 3 m capped composite gold grades. ID2 and NN interpolations were also estimated for validation purposes. Due to the highly erratic distribution of gold grades at Zone 58N, a five-pass interpolation strategy was adopted using a combination of NN and ID3.

Models were validated using a combination of visual inspection, global bias checks and swath plots. Results were considered acceptable.

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

1.10.2 Models Supporting Mineral Resource Estimates

The descriptions provided in Section 1.10.1 for the estimates for the Detour Lake, North Pit and Zone 58N remain the same for the resource model estimates. The West Detour estimate has updated model limits. The models that support the Mineral Resource estimates have a boundary between the West Detour and Detour Lake models at easting 590140.

The updated model is only used for Mineral Resource reporting, and does not support the Mineral Reserves.

The West Detour area was domained into 10 zones, based primarily on visual observation of gold grade, however, zones may coincide with geological features that can be identified

over longer strike lengths. A block size of 10 x 10 x 7.25 m was selected as an appropriate simulated mining unit.

Samples were initially composited to 1 m lengths for capping purposes, then re-composited to 5 m lengths. Gold grade caps varied by domain, ranging from 7–70 g/t Au. Variography was completed by modeled domain using the capped 5 m composites. Variograms have a significant nugget with an average of 29%.

The estimation of gold grades for West Detour were completed using OK. All but one domain had hard boundaries for estimation purposes. Gold was estimated in six passes of expanding volumes. The first two passes used a minimum of seven composites and a maximum of 16 composites to estimate a block, and the third to sixth passes included a minimum of four composites and maximum of 16. In the multiple pass process, once a block was estimated, it was not re-estimated in subsequent passes.

Estimation validation included visual inspection, examination of swath plots, and comparison of the OK estimate with NN and ID2 estimates. Results were considered acceptable.

Mineral Resource confidence classifications were assigned based on a combination of distance to the nearest drill hole, a minimum number of drill holes, and geological and grade continuity. No Measured Mineral Resources were classified.

1.10.3 Reasonable Prospects of Eventual Economic Extraction

The Detour Lake, West Detour and North Pit resource models were combined in a common model. A pit optimization exercise using Maptek Vulcan software was conducted based on the parameters listed in Table 1-1, which were based on mid-year 2021 cost estimates. The exercise constrained the Measured, Indicated and Inferred Mineral Resource estimates. A revenue factor of one was used to guide the pit design. The conceptual pit encompassed both Detour Lake and West Detour within a single pit. The North Pit remained as a separate pit. For resource estimation reporting purposes, the common model was divided along section line 16,995 E to separate the Detour Lake estimate from the West Detour estimate. The combined model was adjusted for mining depletions as of end July, 2021. Mineral Resources are reported at variable cut-off grades, ranging from 0.35–0.5 g/t Au.

The Zone 58N deposit estimate assumes that the deposit will be mined using underground mining methods, based on the use of transverse and longitudinal long-hole stopes. The stoping geometry and stope heights are based on geological interpretation with dilution assumptions considered. The mineralized domains were modelled with a minimum thickness of 4 m downhole (approximately 3 m true thickness), to ensure that minimum underground mining widths were addressed. The estimate is reported above a cut-off grade of 2.2 g/t Au using the parameters listed in Table 1-2.

Table 1-1: Conceptual Resource Pit Optimization Parameters

Parameters	Units	Value
Gold price	(US\$/oz)	1,500
Exchange rate	(\$C/US\$)	1.31
Royalty	%	2
Refiner charge	%	0.05
Net gold price	(C\$/oz)	1,921
Metallurgical recovery	(%)	Various (based on formulae)
Mining cost (excluding vertical cost increment)	(C\$/t mined)	3.05
Process cost	(C\$/t milled)	8.82
G&A	(C\$/t milled)	3.47
Sustaining capital (non mining)	(C\$/t milled)	2.19
Sustaining capital (mining)	(C\$/t mined)	0.56
Value per gram	(\$C/g Au)	56.58
Breakeven cut-off grade	g/t	0.32
Marginal cut-off grade	g/t	0.22
\$/bench 7.25 m	C\$/t/bench	0.019
Pit slope angle	Degrees	25–58

Table 1-2: Underground Cut-off Grade Input Parameters

Parameters	Units	Value
Gold price	US\$/oz	1,300
Exchange rate	US\$/C\$	1.25
Mill recovery	%	97
Refining costs	C\$/oz	5.00
Mining cost (average cost)	C\$/t	75
Processing & tailings costs	C\$/t	9.00
G&A costs	C\$/t	11.50
Mining dilution	% at zero grade	12
Calculated cut-off grade	g/t Au	2.2

1.11 Mineral Resource Statement

Mineral Resources are reported using the 2014 CIM Definition Standards and are reported exclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Mineral Resources are reported in Table 1-3 and Table 1-4. The Mineral Resources estimated for the North Pit and Zone 58N have an effective date of December 31, 2020. The Mineral Resources estimated for Detour Lake and West Detour have an effective date of 26 July, 2021. The Qualified Person for the Detour Lake, North Pit, and Zone 58 N estimates is Mr. Andre Leite, P.Eng., a Kirkland Lake Gold employee. The Qualified Person for the West Detour estimate is Mr. Juan Figueroa, P.Geo., a Kirkland Lake Gold employee.

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

There is no material difference between the two West Detour resource models within the designed pit shapes that constrain the Mineral Reserve estimates.

The additional mineralization in the updated West Detour model represents potential Project upside. There is potential to redesign the Detour Lake and Detour West open pits to convert some or all of those Indicated Mineral Resources to Mineral Reserves, and thus revise the mine plan and potentially increase the mine life. However, mining studies such as assessment of tailings and waste rock storage capacities, optimized pit planning and consideration of any future permitting requirements will have to be considered in such a conversion.

1.12 Mineral Reserve Estimates

Mineral Reserves are reported as the diluted ore tonnage and grade scheduled to be fed to the mill over the life of the operation, based on open pit mining methods. The associated production schedule considers an optimized mill and stockpile strategy to maximize discounted cash flows. Measured and Indicated Mineral Resources within the Detour Lake, West Detour and North Pit final pits as discussed in Section 1.10.1 were converted to Proven and Probable Mineral Reserves respectively. There is no material difference between the two West Detour resource models within the designed pit shapes that constrain the Mineral Reserve estimates. Inferred Mineral Resources captured within the pit shells were set to waste.

Table 1-3: Measured and Indicated Mineral Resource Statement

Deposit	Cut-off Grade (g/t Au)	Measured			Indicated			Total Measured and Indicated		
		Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
Detour Lake	0.35–<0.5	3.0	0.42	41	68.9	0.42	932	71.9	0.42	973
West Detour		—	—	—	113.5	0.42	1,530	113.5	0.42	1,530
North Pit		—	—	—	0.2	0.43	2	0.2	0.43	2
<i>Subtotal</i>		<i>3.0</i>	<i>0.42</i>	<i>41</i>	<i>182.5</i>	<i>0.42</i>	<i>2,464</i>	<i>185.5</i>	<i>0.42</i>	<i>2,505</i>
Detour Lake	>0.5	22.8	1.68	1,231	—	182.8	1.00	5,872	205.6	1.07
West Detour		—	—	—	—	180.4	0.88	5,096	180.4	0.88
North Pit		—	—	—	—	0.5	0.90	15	0.5	0.90
<i>Subtotal</i>		<i>22.8</i>	<i>1.68</i>	<i>1,231</i>	<i>363.7</i>	<i>0.94</i>	<i>10,983</i>	<i>386.5</i>	<i>0.98</i>	<i>12,214</i>
Zone 58N	2.2	—	—	—	2.9	5.80	534	2.9	5.80	534
Total Measured and Indicated	Variable	25.8	1.53	1,272	549.1	0.79	13,981	574.9	0.83	15,252

Table 1-4: Inferred Mineral Resource Statement

Deposit	Cut-off Grade (g/t Au)	Inferred		
		Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
Detour Lake	0.35–<0.5	9.3	0.42	124
West Detour		10.8	0.42	146
North Pit		0.0	0.37	0
<i>Subtotal</i>		<i>20.0</i>	<i>0.42</i>	<i>270</i>
Detour Lake	>0.5	11.6	0.92	343
West Detour		16.6	0.94	502
North Pit		0.0	0.88	0



Deposit	Cut-off Grade (g/t Au)	Inferred		
		Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
<i>Subtotal</i>		28.3	0.93	845
Detour Lake (in Mineral Reserve pit)	0.35–<0.5	2.0	0.41	27
West Detour (in Mineral Reserve pit)		0.0	0.41	1
North Pit (in Mineral Reserve pit)		0.0	0.45	0
<i>Subtotal</i>		2.1	0.41	28
Detour Lake (in Mineral Reserve pit)	>0.5	1.9	0.83	52
West Detour (in Mineral Reserve pit)		0.1	0.67	1
North Pit (in Mineral Reserve pit)		0.0	0.85	0
<i>Subtotal</i>		2.0	0.83	53
Zone 58N	2.2	1.0	4.35	136
Total Inferred	Variable	53.4	0.78	1,332

Notes to accompany Mineral Resource tables:

1. The Mineral Resources estimated for the North Pit and Zone 58N have an effective date of December 31, 2020. The Mineral Resources estimated for Detour Lake and West Detour have an effective date of 26 July, 2021. The Qualified Person for the Detour Lake, North Pit, and Zone 58 N estimates is Mr. Andre Leite, P.Eng., a Kirkland Lake Gold employee. The Qualified Person for the West Detour estimate is Mr. Juan Figueroa, P.Geo., a Kirkland Lake Gold employee.
2. Mineral Resources are reported exclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Mineral Resources are reported using the 2014 CIM Definition Standards.
3. Mineral Resources considered amenable to open pit mining methods were estimated using a gold price of US\$1,500/oz, variable metallurgical recovery assumptions based on formulae, refining and transport costs of C\$5/oz Au, 2% royalty, mining costs of C\$3.05/t mined, process costs of C\$8.82/t milled, general and administrative costs of C\$3.47/t milled, non-mining sustaining capital costs of \$2.19/t milled, mining sustaining capital costs of C\$0.56/t mined, incremental bench cost of \$0.019/t/bench, and variable pit slope angles that range from 25–58°. The estimate is reported above cut-off grades that vary from 0.35–0.5 g/t Au.
4. Mineral Resources considered amenable to underground pit mining methods were estimated assuming long-hole and transverse stoping methods. The estimates used a gold price of US\$1,300/oz, metallurgical recovery assumption of 97%, refining and transport costs of C\$5/oz Au, average mining cost of C\$75/t mined, process and tailings costs of C\$9/t milled, general and administrative costs of C\$11.50/t, assumed dilution average of 12%. The estimate is reported above a cut-off grade of 2.2 g/t Au.
5. Estimates have been rounded in accordance with reporting guidelines. Totals may not sum due to rounding.

Each deposit was optimized independently to reflect the different bench height planned for that pit. The parameters and respective values assumed in the pit optimization process are presented in Table 1-5. Based on the costs and price assumptions presented in the table, a set of pit shells associated with a range of revenue factors was generated for each of the deposits. The final pit selection was based on conventional best-worst case analysis of discounted cash-flows. The selected shells guiding final pit design were associated with revenue-factors of 0.88 for Detour, 0.95 for West Detour and 0.90 for North Pit.

The engineered pit designs were completed using the pit optimization shells as a guide in order to maximize the value and gold recovered inside the ultimate pits. The resulting pit designs include practical geometry that is required in an operational mine, such as the haul road to access all the benches, recommended pit slopes with geotechnical berms, proper benching configuration and smoothed pit walls.

The cut-off evaluation incorporated considerations of mill and stockpile capacities, mine constraints and economic parameters when defining mill and stockpile cut-off grades over time in a yearly basis. The marginal cut-off grade is 0.27 g/t Au but an elevated cut-off of 0.35 g/t Au is used as a minimum in the cut-off grade optimization process. Mining will use the variable optimized cut-off grade strategy, because it moves forward ounce production and delays stripping as much as possible.

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

1.13 Mineral Reserve Statement

Mineral Reserves are reported using the 2014 CIM Definition Standards. The Qualified Person for the estimate is Mr. Andre Leite, P.Eng., a Kirkland Lake Gold employee. Mineral Reserves have an effective date of December 31, 2020 and are summarized in Table 1-6. Mineral Reserves are reported using a variable optimized cut-off strategy with a minimum cut-off grade of 0.35 g/t Au.

Table 1-5: Pit Optimization Parameters

Optimization Parameter	Unit	Value
Gold price	US\$/oz	1,300
Exchange rate	C\$/US\$	1.31
Royalty	%	2
Refiner charge	%	0.05
Net gold prices	C\$/oz	1,665
Metallurgical recovery	%	Variable
Inter-ramp pit slope angles	°	25.1–56.3
Mining cost (excluding incremental haulage)	C\$/t mined	3.42
Incremental haulage cost		
Detour Lake Pit	C\$/7.25 m bench	0.019
West Detour and North Pit	C\$/6 m bench	0.015
Process cost	C\$/t milled	9.75
G&A	C\$/t milled	3.59
Sustaining capital (non-mining)*	C\$/t milled	3.42
Sustaining capital (mining)	C\$/t mined	0.35
Breakeven cut-off	g/t	0.40
Marginal cut-off	g/t	0.27

Note: = * includes First Nations agreements associated costs

Table 1-6: Mineral Reserves Statement

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

Notes to accompany Mineral Reserves table:

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

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

1.14 Mining Methods

The geotechnical design parameters for Detour Lake Main Pit were reviewed by Golder in 2020. The assessment accounts for a revised bench height of 14.5 m for the Main Pit implemented in 2020 and for information obtained as temporary and final walls are exposed. The geotechnical parameters for the West Detour and North pit were also provided by Golder. A process of ongoing geotechnical monitoring and documentation was implemented at the mine and additional risk mitigation techniques continue to be evaluated and employed as needed.

The mine water management plan is matched to the mine development strategy. Water management infrastructure includes non-contact water diversion structures and water retention ponds, appropriately sized based on hydrological/hydrogeological modeling and the changes in mining activity and stockpiling over the LOM.

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

The mine operation also requires the management of old underground workings; in general, historical records of underground workings are very reliable. Standard operational procedures regulate the mining activity in these affected areas to ensure a safe operation and risk management.

Both waste rock storage facility (WRSF) and stockpile strategies are in agreement with the permitting strategy for the West Detour pit; and respect related environmental constraints. Currently the mine has two WRSFs (MRS1 and MRS2), one ore stockpile (ROMPAD) and one overburden/topsoil stockpile for mine reclamation purposes (OVB1). The mine plan accounts for three additional ore stockpiles (MRS4, MRS5 and a temporary stockpile within the MRS2 WRSF footprint), three new WRSFs (MRS3, MRS2-extension and Inpit) and one new overburden/topsoil stockpile (West Detour Overburden stock).

The Detour Lake Mine uses conventional truck-shovel open pit mining. The mine is operated using an Owner-operator mining equipment and labour strategy. Excluding the muskeg and overburden/till top layer, all material must be blasted. Pioneering drilling and

blasting is required in the overburden/rock contact. Additionally, during winter months free digging of overburden material is not possible due to frost.

Mining at West Detour is planned to employ similar conventional mining methods with the initial use of smaller equipment for the pre-stripping phase, especially in overburden. Given the smaller dimensions of the North Pit, a smaller fleet size will be used.

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

The mine production schedule forecasts a total 1,725 Mt to be mined over a period of 18 years (2021–2038). A total of 597 Mt of ore is planned to be milled over a period of 22 years (2021–2042); with the last four years of production supported by long-term stockpile reclaim.

The optimized and variable cut-off strategy combined with 158 Mt of stockpile capacity, results in an average LOM stripping ratio of 1.90.

1.15 Recovery Methods

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

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

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

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

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

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

A decant tower system is used to reclaim and pump water from the tailings management area (TMA) back to the process plant to satisfy process water requirements. For Cell#2 a barge reclaim water system will be used. Reclaim water is piped to the process plant. Depending on the water balance in the TMA, water from the open pit and various collection ditches around the WRSFs can also be directed to the plant. Make-up water for the reagent mixing is sourced from East Lake when required.

Consumables used in the plant include: steel balls; quicklime (CaO); sodium cyanide (NaCN) for gold dissolution and desorption; SO₂ and SMBS; anti-scalant; caustic; copper sulphate; carbon is used for gold collection; and ore anti-freeze conditioner.

1.16 Project Infrastructure

Surface infrastructure to support operations is primarily in place, and includes:

- Three open pits: Detour Lake Main (in operation), West Detour and North Pit (to be constructed);
- Processing facilities: grinding and leaching facilities, along with management and engineering offices, change house, workshop, warehouse, and assay laboratory facilities;
- Mine facilities: management and engineering offices, change house, heavy mining vehicle and light vehicle workshops, wash bay, warehouse, explosives magazine, crusher, mine access gate house, return water pump house;
- Administration buildings: facilities for overall site management, safety inductions, and general and administrative functions;
- Accommodation camp;
- Four stockpiles: ROM pad, MRS4, MRS5 and the temporary MRS2;
- Four WRSFs: MRS1, MRS2, MRS3 and Inpit ;
- Three tailings storage facilities: cell 1, 2 and 3;
- Water management facilities: stormwater and water storage dams, diversions, culverts;
- Landfill facility.

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

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

Workers are accommodated in two camps. The Little Hopper Lodge (previously referred to as the Permanent Camp) is located 7 km west of the mining operations in close proximity to Little Hopper Lake. The Sagimeo Lodge is located just south of the mine services building. Accommodations are in the process of being expanded, and will have a total capacity of 1,447 persons.

Potable water for the Little Hopper Lodge is obtained from Little Hopper Lake. This is adequate for the Detour Lake's current and future needs. Potable water for the Sagimeo Lodge, mine services facilities, site administration facility, and the processing plant is obtained from borehole wells close to the camp. Fresh water is pumped from East Lake and is primarily used in the processing plant for reagent mixing but is also used as wash water in the truck wash facility and water make-up for the fire water tank.

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

1.17 Environmental, Permitting and Social Considerations

1.17.1 Environmental and Supporting Studies

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

1.17.2 Monitoring

The mine is required to comply with air quality standards, point of impingement guidelines, and ambient air quality criteria specified in Ontario Reg. 419/05. The installed operating monitoring systems demonstrate compliance with these standards, which confirms the predictions of no significant air quality or noise impacts.

Due to historical mining in the region, the geological materials (ore, waste rock, tailings, and overburden) at the Detour Lake Main Pit have undergone multiple metal leaching and acid rock drainage (ML/ARD) assessments by various investigators in compliance with best-



practice, industry-standard methods. To date, over 80% of waste rock has been classified as non-potentially acid generating (NAG). Analytical results continue to support that ARD risk is low based on low sulphide content. To provide greater assurance in the event of ARD during operations and/or closure, PAG and NAG waste rock materials are segregated into separate stockpiles. Production tailings are governed by the same classification criteria as waste rock and are subject to frequent confirmatory sampling.

Mine-contact water from all mine facilities, including stockpiles and tailings management area (TMA) cells, is captured by the water management system, a network of collection ditches, ponds, pipelines and pumping infrastructure to ensure environmental protection. Discharge of surplus mine-contact water occurs only at select, specially permitted locations, provided that water quality meets federal, provincial, and site-specific permitted criteria. Water that has been in contact with processing reagents (i.e., water stored in the TMA) is not discharged, and is instead re-circulated through the process plant or locked in tailings void spaces.

Kirkland Lake Gold notes the following:

- Water quality: the monitoring network includes approximately 71 surface water stations and 141 groundwater stations. Regular data collection, analysis, and interpretation on a monthly and quarterly basis allow for risk identification and adaptive management;
- Fisheries and other aquatic resources: mitigation measures were implemented to limit potential effects related to mining of the Detour Lake Main Pit on aquatic resources. In addition, a fish compensation plan was approved by the federal and provincial regulatory agencies, following full consultation with Indigenous communities, to address impacts related to the development of the TMA and mine rock stockpiles. Additional mitigation measures and compensations plans have been proposed to address potential impacts to fisheries and other aquatic resources related to the development of the West Detour pit.
- Groundwater: no significant environmental impacts to groundwater are currently predicted to occur in conjunction with the mining of the Detour Lake Main Pit, West Detour Pit, or North Pit, or the development of mine rock stockpiles or the TMA, after the implementation of proposed mitigation measures;
- Vegetation and wildlife: measures to minimize adverse effects to area plants and wildlife include but are not limited to: optimizing the Project footprint; maintaining a minimum 120 m buffer around watercourses; avoidance of unnecessary disturbance to wetlands; and avoidance of tree clearing during the bird nesting period. Recommendations for the protection of Woodland Caribou include as reasonable: minimizing the overall project footprint; avoidance of critical over-wintering habitat; minimizing disturbance to mature upland black spruce–jack pine forests that support a high abundance of terrestrial and arboreal lichens (a preferred food source); and minimizing the potential for caribou/vehicular traffic interaction. Kirkland Lake Gold has also implemented a caribou tracking and monitoring program.

- Cultural and heritage resources: none of the studies completed identified archaeological sites that are proximal to the Detour Lake Mine site, including the West Detour area, that are likely to be affected by the mine in any foreseeable manner. The overall potential for encountering unforeseen cultural heritage or archaeological sites that would conflict with the proposed development plan for the site is considered to be extremely low.

1.17.3 Tailings Management Area

Tailings are stored at surface in an engineered TMA located east of the process plant. The TMA consists of three cells being developed in a planned, progressive manner: Cell 1 was built over a historic tailings storage facility from a previous mining operation; Cell 2 was developed to the north of Cell 1; and the Cell 3 area was cleared to the south of Cell 1. Cells 1 and 2 are dominantly tailings storage cells, while the Cell 3 area will first be used for the mine water pond (a water management facility), until the Cell 3 tailing facility is constructed later in the mine life (2027). The TMA is designed to function as three independent cells for tailings and water management. Tailings deposition will generally occur in only one cell at any time with water recycle for process plant use occurring mainly from the active cells, but possibly also during some periods from the inactive deposition cell prior to final closure.

The initial design of the TMA was optimized during ongoing operations, as additional information became available through ongoing construction and in response to a requirement for additional capacity (and wish to stay within the same footprint). In Q4 2020, tailings deposition was transitioned from Cell 1 to Cell 2. The construction of a thickened tails facility is planned with deposition of thickened tails starting in January 2025. Starting in 2037, tails are to be deposited in the Detour Main Pit (mine operation in the Detour Main Pit is forecast to be complete in 2036). The TMA Cell 2 and Cell 3 facility will provide for storage of approximately 283 Mm³ (454 Mt) of tailings solids. Capital investment is reflected in the cash flow model.

Inspection and monitoring is performed during construction and operation of the tailings dams to assess their performance and safety; and to verify that actual conditions are consistent with the design assumptions and intentions. Inspection and monitoring also optimizes maintenance and repair costs, provides warning of potential impending risks, and provides sufficient time to implement remedial measures, if required. A dam safety review completed in 2020 confirmed that the TMA is performing as designed.

1.17.4 Water Management

Environmental protection is ensured through the water management network, which collects seepage and runoff from all mine waste facilities through a system of ditching, pumping, and pipeline infrastructure. The modular design allows for the addition of treatment facilities if required. In 2020, a mine water pond with a capacity of 3.5 Mm³ was completed. The mine water pond serves as a central water management facility (e.g., for



open pit water and local runoff), and provides additional contingencies for storage and treatment, if needed.

Tailings, tailings slurry water, and water reclaimed for the operation of the process plant are managed through the TMA.

1.17.5 Permits

Most mining projects in Canada are reviewed under one or more Environmental Assessment (EA) processes. The federal EA process for Canadian mines is detailed in the CEAA. A federal EA was triggered for the Detour Lake project due to:

- The requirement for an Explosives Factory License under the *Explosives Act* for a project-dedicated explosives manufacturing factory; and
- The need for one or more Authorization(s) for Harmful Alteration Disruption or Destruction of Fish Habitat according to the *Fisheries Act*.

These licences/authorizations were granted.

Four provincial EAs were approved for the Detour Lake project:

- July 2010: Ontario Ministry of Environment Class EA for Electricity Projects, for the diesel power generation required to support the construction phase (AMEC 2010a);
- November 2010: Ontario MNR Class EA for Resource Stewardship and Facility Development Projects, for the construction of facilities off-lease, and for such aspects as on-lease aggregate operations or in-water works (AMEC 2010c);
- December 2010: Ontario individual EA for Electricity Projects, for construction of a 230 kV transmission line (AMEC 2010b);
- March 2012: Ontario MOE individual EA for Electricity Projects of 10 MW, for allowing a diesel-generated contingency power supply to service the construction needs should the powerline not be operable by the third quarter of 2011. With the successful energizing of the powerline in October 2011, these facilities were not installed.

In accordance with Section 143(2) of the *Mining Act*, R.S.O. 1990, Detour Gold submitted a Mine Closure Plan (for Production) in 2010, followed by Closure Plan Update Amendments in 2014 and 2019. ENDM filed these documents on October 28, 2010, February 18, 2015, and November 8, 2019, respectively. In addition, a scoped closure plan amendment was submitted in early 2021 and filed during August 2021 specifically for the airstrip.

Subsequent permits, such as Permits to Take Water and Environmental Compliance Approvals, have been approved, renewed, and/or amended as needed in order to support ongoing development and operations.

Prior to development of the West Detour project, a number of Provincial and Federal environmental approvals, or amendments to existing approvals, will be required. In

particular, the West Detour project is subject to a Class C Environmental Assessment pursuant to the Ontario *Environmental Assessment Act* as managed by NDMNRF. The Environmental Study Report (ESR) was published in draft in January 2017, and a final ESR was submitted to NDMNRF in August 2019. An ESR addendum was submitted in October 2020 to address additional comments from government and Indigenous communities. The West Detour ESR was approved and a statement of completion was provided in March 2021.

The environmental approval applications will provide additional detail regarding the engineering design of the proposed West Detour project facilities, potential effects and proposed mitigations measures. No changes were expected to the approvals list at the Report effective date.

1.17.6 Closure and Reclamation

Kirkland Lake Gold acknowledges that the company will be responsible for providing the full amount of the financial assurance for the closure and rehabilitation of the Detour Lake Mine and the West Detour project, subject to any required or approved changes to the Closure Plan. There are six developmental phases that trigger the issuance of security bonding for the operation. Financial assurance is submitted to the NDMNRF prior to the beginning of the associated activities of each phase, or as otherwise arranged with the NDMNRF.

As per the Detour Lake Mine Closure Plan Amendment 2, the total estimated closure cost for the Detour Lake Operations at peak development (i.e., all facilities constructed) is \$149,811,737, exclusive of the West Detour project. Security provided to the NDMNRF to date for the present stage of development totals \$105,798,258. Financial assurance for the West Detour project will be formalized with the filing of Closure Plan Amendment 3, anticipated for Q2 2022/Q3 2022.

1.17.7 Social Considerations

Kirkland Lake Gold has undertaken ongoing consultation with the public, government regulators and its Indigenous partners regarding the operations, environmental commitments and planned activities. Kirkland Lake Gold has established the following consultation principles:

- Early notification;
- Open communication;
- Accessible information;
- Flexible process;
- Capacity building;
- Mutual respect.

These principles continue to guide interactions within mine permitting, operations, and exploration.

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

1.18 Markets and Contracts

No market studies are currently relevant as Detour Lake is an operating mine producing a readily-saleable commodity in the form of doré. Doré is sent via secure transportation to a refinery for further refining. Detour Gold sells its gold production into the market at spot prices or on a forward sales basis. The proceeds from these sales are credited to Detour Gold's account upon delivery of the gold to the counterparty. The estimated bullion transport costs, liability charges and refining costs used for the financial analysis are based on contract prices agreed with third-parties.

Commodity prices used in Mineral Resource and Mineral Reserve estimates are set by Kirkland Lake Gold at the corporate level. The current gold price provided for Mineral Reserve estimation is US\$1,300/oz, and US\$ 1,500/oz for Mineral Resource estimation. Both Mineral Resource and Mineral Reserve estimates use an exchange rate assumption of 1.31 C\$/US\$.

Kirkland Lake Gold has a number of contracts, agreement and/or purchase orders in place for supply and services that are material to the operation. All contracts or agreements are negotiated with vendors and have a contractual scope, terms and conditions. Contracts are negotiated and renewed as needed. Contract terms are considered to be within industry norms, and typical of similar contracts in Canada with which Kirkland Lake Gold is familiar.

1.19 Capital Cost Estimates

Capital costs consist largely of mining equipment (replacements, additions, component replacements, capitalized maintenance), construction of tailings cells and dam raises, deferred stripping using a by-phase approach, and processing plant projects to increase plant capacity to 28 Mt/a.

Capital costs for the first three years of plan are based on budget cycle estimates with supplier quotes, engineered designs, maintenance strategies, production plans or preliminary estimates. Estimates in later years are based on maintenance strategies, equipment replacement schedules, and long-term sustaining capital estimates are based on recent operating history and current asset value. Tailings cells 2 and 3 are based on physical material movement requirements and recent unit cost history.

The LOM capital cost estimate is provided in Table 1-7. The LOM plan estimated total capital cost is C\$4,744 million.

1.20 Operating Cost Estimates

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

All operating costs were evaluated on an annual basis and include all costs related to:

- Mining ore and waste from the Detour Lake, West Detour and North pits;
- Processing of ore;
- All expenses associated with site administration;
- Adjustments for deferred stripping and changes in inventory;
- Costs related to agreements with First Nations;
- Royalties to Franco Nevada and First Nations.

The consumables for the operation are based on current prices or contracts for future years. In general, approximately 80% of operating costs are based in Canadian dollars and 20% have US dollar exposure. The exchange rate used in the financial model is 1.31 C\$/US\$.

The LOM operating cost estimate is provided in Table 1-8 and Table 1-9.

The LOM plan estimated total operating cost is \$12,538 million. The LOM mining unit cost¹ is C\$3.47/t mined. The LOM operating unit cost in C\$/t milled¹ is C\$21.00/t milled. The LOM operating unit cost in C\$/oz sold¹ is C\$864/oz sold.

1.21 Economic Analysis

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

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

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

¹ Refer to Cautionary Statement on Non-IFRS Financial Performance Measures.

Table 1-7: Capital Cost Summary by Area

Capital Cost Summary (C\$M)	2021–2025	2026–2030	2031–2035	2036–2040	2041–2043	LOM
Mining ¹	529	557	285	138	29	1,538
Deferred stripping	606	717	48	—	—	1,371
Processing	301	64	53	38	7	463
Tailings management	308	358	332	—	—	997
West Detour	87	9	2	1	—	100
Site administrative ²	148	39	38	38	12	274
Total Capital Costs	1,978	1,744	757	216	48	4,744

Notes: 1. Includes capital projects, equipment replacements/additions, planned component replacements, and capitalized portion of maintenance and repair contract of 795 haul trucks. 2. Includes infrastructure, water management, and camp.

Table 1-8: Operating Cost Summary

Operating Cost (C\$M)	2021–2025	2026–2030	2031–2035	2036–2040	2041–2043	LOM
Mining ^{1,2}	1,826	1,886	1,530	665	83	5,989
Processing ³	1,084	1,244	1,244	1,244	394	5,209
Site administration ^{4,5}	508	519	502	295	86	1,910
<i>Subtotal</i>	<i>3,417</i>	<i>3,649</i>	<i>3,276</i>	<i>2,204</i>	<i>563</i>	<i>13,109</i>
Adjustments ⁶	(734)	(695)	(231)	671	418	(571)
Total	2,683	2,954	3,045	2,875	981	12,538

Notes: 1. Excludes adjustment for deferred stripping. 2. Mining costs reduction reflect depletion of stockpiles late in mine life. 3. Increase in Processing costs reflects increased electricity price starting in 2025. 4. Includes First Nations costs. 5. Reduction in the Site Administration charges late in the mine life reflects a reduction in mining activity. 6. Includes adjustments for deferred stripping, royalties, and changes in inventory.

Table 1-9: Operating Unit Cost Summary

		2021– 2025	2026– 2030	2031– 2035	2036– 2040	2041– 2043	LOM
Mining unit cost (C\$/t ex-pit) ¹	Mining ²	3.19	2.98	3.69	6.29	—	3.47
Operating unit cost (C\$/t milled) ¹	Mining ^{2,3}	13.75	13.47	10.93	4.75	1.87	10.03
	Processing ⁴	8.16	8.88	8.89	8.88	8.91	8.73
	Site administration ^{5,6}	3.82	3.71	3.59	2.11	1.95	3.20
	<i>Subtotal</i>	<i>25.74</i>	<i>26.06</i>	<i>23.40</i>	<i>15.74</i>	<i>12.73</i>	<i>21.96</i>
	Adjustments ⁷	(5.53)	(4.96)	(1.65)	4.79	9.46	(0.96)
	<i>Total</i>	<i>20.21</i>	<i>21.10</i>	<i>21.75</i>	<i>20.53</i>	<i>22.19</i>	<i>21.00</i>
Operating unit cost (C\$/oz sold) ¹	Total	742	916	687	1,078	1,697	864

Notes: 1. Refer to Cautionary Statement on Non-IFRS Financial Performance Measures. 2. Excludes adjustment for deferred stripping. 3. Mining costs reduction reflect depletion of stockpiles late in mine life. 4. Increase in Processing costs reflects increased electricity price starting in 2025. 5. Includes First Nations costs. 6. Reduction in Site Administration charges late in mine life reflects reduction in mining activity. 7. Includes adjustments for deferred stripping, royalties, and changes in inventory.

Royalties included in the economic analysis are:

- Franco Nevada: 2% net smelter return;
- First Nations payments.

Taxes included in the economic evaluation are the Federal Income Tax (15%), Provincial Income Tax (10%), and the Ontario Mining Tax. Depreciation schedules based on current depreciable balances and yearly capital additions were used to model tax depreciation for Processing and Transportation Assets as well as Mining Assets. The tax model was completed at the Project level, which has the Detour Lake Mine as a stand-alone operating asset.

Closure costs are based on reclamation schedule extending through to the next century up to the year 2337. Progressive reclamation occurs throughout the operating period. Reclamation activities are broken down into active closure, passive closure/flooding of the mine pit, final closure/ active discharge, and post closure/passive discharge.

The base case economic analysis assumes 100% equity financing and is reported on a 100% project ownership basis. The base case economic analysis assumes constant prices with no inflationary adjustments. Capital and operating costs are expressed in 2021 Canadian dollars.

The cumulative free cash flow before tax ¹ is estimated at \$11,141 M. The cumulative free cash flow after tax ² is \$8,354 M. At a 5% discount rate, the net present value of free cash

¹ Refer to Cautionary Statement on Non-IFRS Financial Performance Measures.

flow before tax is \$6,614 M and of free cash flows after tax is \$4,968 M. Internal rate of return and payback period results are not relevant as the cumulative discounted after-tax free cash flows are never negative. This reflects the fact that the Detour Lake Mine is already in operation and that operating cash flows are sufficient to cover sustaining and growth capital requirements. Table 1-10 is a summary of the discounted cash flow analysis.

1.22 Sensitivity Analysis

A sensitivity analysis was performed considering variations in metal prices, exchange rates, operating costs and capital costs. Flexing based on gold grade processed was excluded because it reflects the same sensitivity as gold price (given flat gold price assumption). Results are shown in Figure 1-1. Sensitivity of the Project to changes in gold price and exchange rate are shown in Figure 1-2; the Project has positive after tax net present value under the Base Case (US\$1,500/oz and 1.31 C\$/US\$) and under the assumptions of Mineral Reserve estimation (US\$1,300/oz and 1.31 C\$/US\$). The sensitivity to discount rate and the assumed discount rate range is shown in Figure 1-3.

The undiscounted free cash flow after tax¹ is negative at a gold price of US\$895/oz. The net present value of free cash flow after tax¹ is negative at a gold price of US\$940/oz. The Project is most sensitive to changes in the gold price and exchange rate, less sensitive to operating cost changes, and least sensitive to changes in the capital cost assumptions.

1.23 Interpretation and Conclusions

Under the assumptions presented in this Report, the Project has a positive free cash flow after tax², and Mineral Reserve estimates can be supported.

1.24 Risks and Opportunities

The major risks to the Detour Lake Operations are associated with:

- Negative variations to the gold and diesel price assumptions;
- Significant additional dilution or ore losses;
- Significant delays in the assumed permitting timeline for the West Detour project;
- Changes in the geotechnical assumptions;
- Lower than planned plant production capacity.

¹ Refer to Cautionary Statement on Non-IFRS Financial Performance Measures

² Refer to Cautionary Statement on Non-IFRS Financial Performance Measures

Table 1-10: Summary of Discounted Free Cash Flow Analysis.

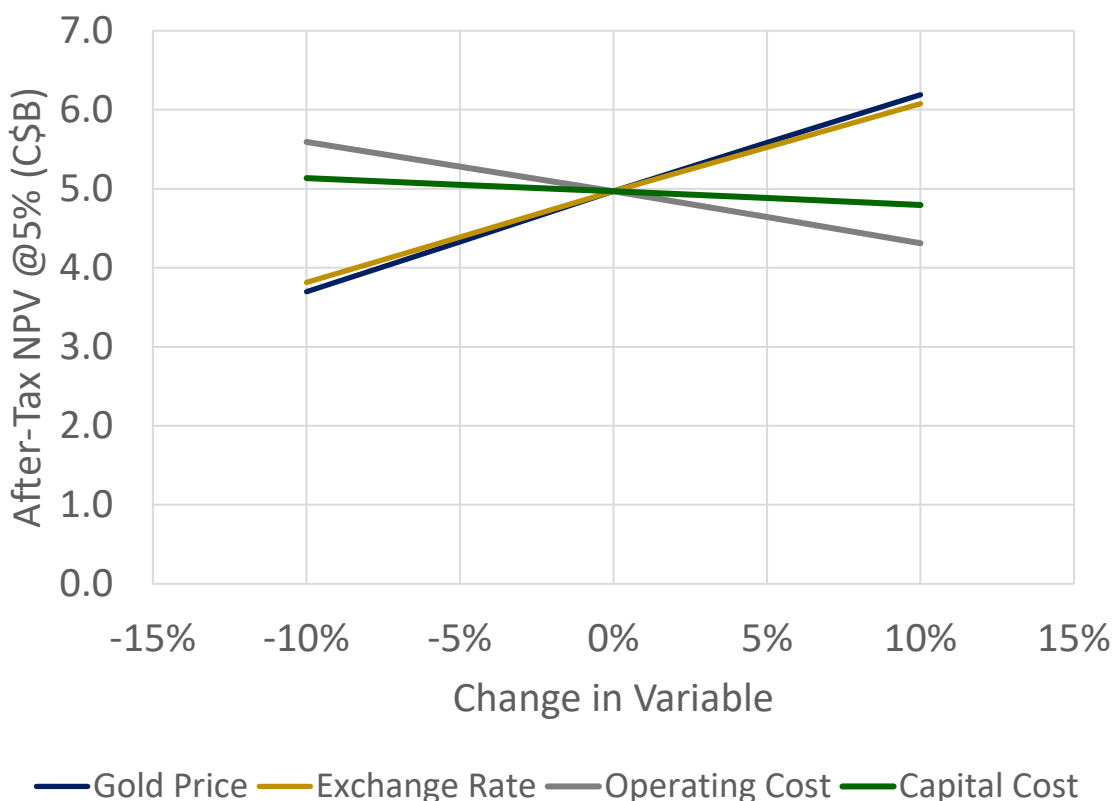
Item	LOM
Physicals	
<i>Mining</i>	
Ore mined (Mt)	593.9
Waste mined (Mt)	1,131.4
Ex-pit mined (Mt)	1,725.3
Strip ratio (waste/ore)	1.90
Ex-pit ore grade (g/t)	0.82
<i>Processing</i>	
Milled (Mt)	597.0
Head Grade (g/t)	0.82
Recovery (%)	91.9
Gold recovered (koz)	14,499
Gold poured (koz)	14,518
<i>Sales</i>	
Gold price (C\$/oz)	1,965
Gold sold (koz)	14,519
Cash Flow (C\$M)	
Gross gold revenues	28,530
Refining & transport costs	(32)
Net Gold Revenues	28,497
Site operating costs – mining ¹	(4,619)
Site operating costs – processing	(5,209)
Site operating costs – site administration	(1,910)
Subtotal site costs	(11,738)
Royalties and First Nations payments	(765)
Changes in inventory	(35)
Operating Margin ²	15,959
Capital expenditures	(4,744)
Reclamation	(104)
Lease payments	(12)
Less: changes in working capital	41
Free cash flow before taxes ²	11,141
Federal income tax	(1,317)
Provincial income tax	(902)
Ontario mining tax	(568)
Free cash flow after taxes ²	8,354



Item	LOM
Discounted free cash flow before tax	6,614
Discounted free cash flow after tax	4,968
Operating cash cost (US\$/oz) ²	619
Cash AISC (US\$/oz) ²	821

Note: 1. Includes adjustment for deferred stripping. 2. Refer to Cautionary Statement on Non-IFRS Financial Performance Measures. AISC = all-in sustaining costs.

Figure 1-1: Sensitivity of After-Tax Net Present Value to Gold Price, Exchange Rate, Operating Cost, and Capital Cost



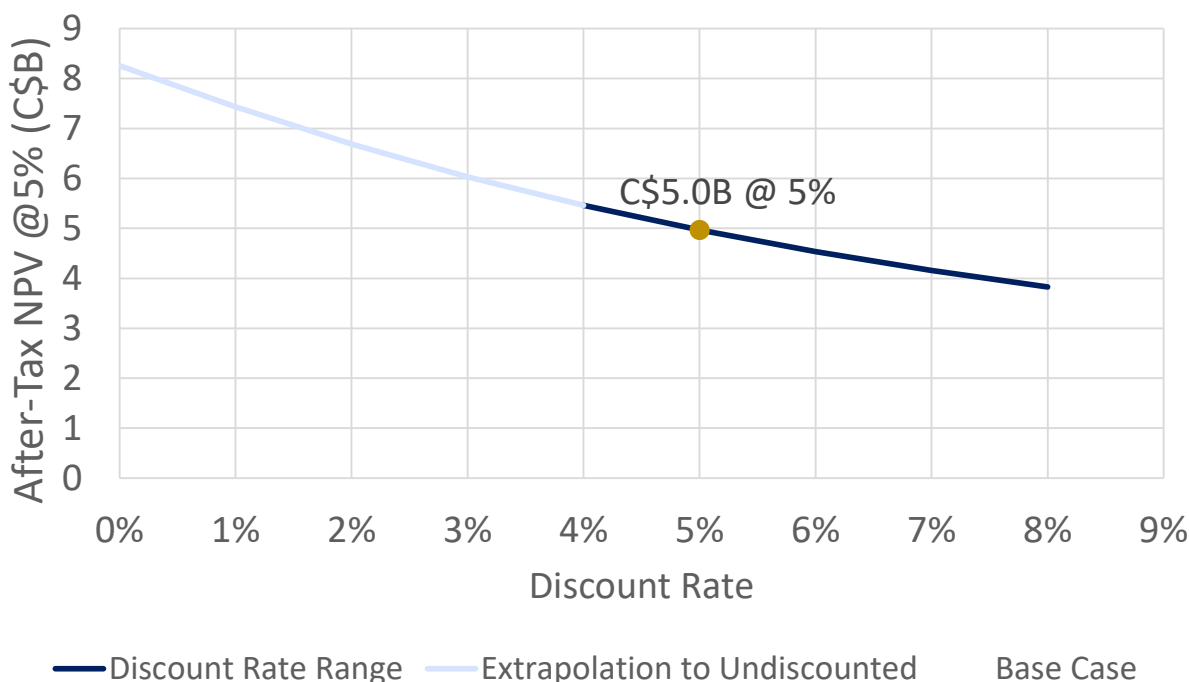
Note: Figure prepared by Kirkland Lake Gold, 2020.



Figure 1-2: Sensitivity of After-Tax Net Present Value to Gold Price and Exchange Rate

After Tax NPV @ 5% (C\$M)			Exchange Rate (CAD/USD)				
			-0.10	-0.05	Base	+0.05	+0.10
Gold Price (USD/oz)	-200	1,300	2,480	2,856	3,248	3,647	4,023
	-100	1,400	3,280	3,711	4,118	4,523	4,936
	Base	1,500	4,085	4,522	4,968	5,393	5,816
	+100	1,600	4,870	5,331	5,786	6,238	6,689
	+200	1,700	5,631	6,114	6,596	7,077	7,554

Figure 1-3: Sensitivity of After-Tax Net Present Value to Discount Rate



Note: Figure prepared by Kirkland Lake, 2020.

The major opportunities are:

- The additional mineralization in the updated West Detour model represents potential Project upside. There is potential to redesign the Detour Lake and Detour West open pits to convert some or all of those Indicated Mineral Resources to Mineral Reserves, and thus revise the mine plan and potentially increase the mine life. However, mining studies such as assessment of tailings and waste rock storage capacities, optimized pit planning and consideration of any future permitting requirements will have to be considered in such a conversion;
- Further improvements in the grade control processes with the installation of an assay laboraroty at the mine site;



- Increased level of automation in the mine operation (upgrade of the mine network to long-term evolution (LTE) enables higher level of automation);
- Use of alternative energy sources to diesel with the intent of improving business sustainability and competitiveness;

1.25 Recommendations

A two-phase work program is proposed. The two phases can be conducted concurrently. The total estimated budget is C\$106.4 million.

The first work phase consists of the mine plan update to incorporate the 2021 West Detour Mineral Resource estimation (expanded West Detour limits). This will require review and consideration of, amongst other mining and technical parameters, WRSF and TSF capacities, pit optimization, geotechnical and hydrogeological parameters, supporting infrastructure requirements, and capital and operating costs. This program is estimated to require a budget of approximately C\$2 million to complete mainly related to additional geotechnical drilling in the area between the Detour Lake and the West Detour pits.

The second work phase consists of exploration drilling. The program in the near-mine area should focus on mineralization below the 800 m Level, mineralization continuing along strike and downplunge to the west of the West Detour open pit, and the potential for mineralization further east and west of the pits along the Sunday Lake Deformation Zone. Regional exploration should target the Lower Detour area along the Lower Detour and Massicotte Deformation Zones in the vicinity of the 58N zone. The near-mine and regional exploration programs assume drilling of 430,000 m at an all-in cost of C\$243/m, for a total program cost of C\$104.4 million.

2.0 Introduction

2.1 Introduction

Mr. Steve Gray, Mr. Andre Leite, Mr. Juan Figueroa, Mr. Jean-Francois Dupont, Dr. Veronika Raizman, and Mr. Paul Andrew Fournier prepared a NI 43-101 Technical Report (the Report) on the Detour Lake Operations (the Detour Lake Operations, Detour Lake Mine, or the Project) for Kirkland Lake Gold Ltd (Kirkland Lake Gold). The Detour Lake Operations are located in in northeastern Ontario (Figure 2-1).

The Detour Lake Operations consist of the operating Detour Lake Main Pit, and planned open pit operations at the West Detour and North Pits. Mineral Resources are estimated for the Detour Lake, West Detour, Saddle, and Zone 58N areas. Mineral Reserves are estimated for the Detour Lake and West Detour areas. The West Detour estimate is split into the West Detour and North Pit pits.

2.2 Terms of Reference

The Report supports disclosure in the news release dated 2 September, 2021, entitled “Kirkland Lake Gold Announces 10.1 Million Ounce Increase in Measured and Indicated Mineral Resources at Detour Lake Mine”.

Units used in the report are metric units unless otherwise noted. Monetary units are in Canadian dollars (C\$) unless otherwise stated. All ounce units refer to troy ounces. The Report uses Canadian English. Mineral Resources are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014; the 2014 CIM Definition Standards).

2.3 Qualified Persons

The following Kirkland Lake Gold employees serve as the qualified persons for this Technical Report as defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects, and in compliance with Form 43-101F1:

- Mr. Steven Gray, P.Geo., Exploration Superintendent;
- Mr. Andre Leite, P.Eng, Vice President Technical Services;
- Mr. Juan Figueroa, P.Geo., Manager of Mineral Resources;
- Mr. Jean Francois Dupont, P.Eng, Detour Lake Manager Metallurgy;
- Dr. Veronika Raizman, P.Geo., Manager, Reclamation & Geochemistry;
- Mr. Paul Andrew Fournier, P.Eng, Manager, Cost Accounting.

Figure 2-1: Project Location Plan

Note: Figure prepared by Kirkland Lake Gold, 2020.

2.4 Site Visits and Scope of Personal Inspection

Mr. Steven Gray has worked for Kirkland Lake Gold as Exploration Superintendent since May 2020. He visited the mine site on a monthly basis. His most recent site visits included July 13–16, 2021 and again on August 26, 2021. During his most recent site visits, he communicated core drilling planning and prioritization, reviewed geology and mineralization encountered from exploration activities, accessed core processing operations and sample dispatch methodology, and outlined future regional geological activities. During these visits to site also he also inspected core drill rigs, drill collar locations and site remediations, reviewed infrastructure requirements, staffing levels, employee development and health and safety statistics

Mr. Andre Leite worked for the Detour Lake Mine as a Technical Service Manager from October 2018 to April 2021. He is currently Vice President of Technical Service based at

Kirkland Lake Gold's Timmins hub office and regularly visits the mine site. His most recent site visit in 2021 was on September 13, 2021. During that site visit, he participated in operational management meetings. During earlier site visits, he reviewed weekly and daily mine plans, held discussions on grade control processes and results.

Mr. Juan Figueroa has worked for Kirkland Lake Gold as a Manager of Mineral Resources since June 2020. His most recent site visit was from July 21–23, 2020. During that site visit, he examined the drilling exploration advances impacting the Saddle and West Detour Mineral Resource estimates, the drilling plans for the remainder of 2020, and reviewed the grade control process implemented by the geology department in the Detour Lake pit.

Mr. Jean Francois Dupont has worked at the Detour Lake Mine from 2011 and has been based at the Detour Operation since that time to the Report effective date. Mr Dupont was directly involved in the engineering, construction and commissioning of the Detour Lake Mine processing plant, and has been involved with plant operations since commissioning.

Dr. Veronika Raizman was based at the Detour Lake Mine from 2016 to 2020, and now works from Kirkland Lake Gold Inc.'s Toronto corporate office. Her most recent site visit was from March 12 to 19, 2020. During that site visit, Dr. Raizman performed her regular duties with respect to the management of the Detour Lake Mine's geochemical monitoring, reclamation programs, and regulatory permitting and compliance.

Mr. Paul Andrew Fournier's most recent site visit was from July 2–15, 2020. During this visit, he viewed the mine services facility, the exterior of the processing plant, and Little Hopper Lodge. He had discussions with site personnel for the preparation of the financial model for the quarterly (6+6) forecast.

2.5 Effective Dates

There are a number of effective dates pertinent to the Report, as follows:

- Most recent information on the ongoing drilling program: September 30, 2021;
- Most recent information on mineral tenure and surface rights: October 12, 2021;
- Geotechnical mine design parameters for Detour Lake pit: May 5, 2020;
- Geotechnical mine design parameters for West Detour and North Pit: September 26, 2019;
- Database close-out date for purposes of Mineral Resource estimation:
 - Detour Lake: April 24, 2020;
 - West Detour: July 26, 2021;
 - North Pit: November 24, 2016;
 - Zone 58N: February 2018;
- Effective date of the Mineral Resource estimate supporting Mineral Reserves:

- North Pit: December 31, 2020;
- Detour Lake: December 31, 2020;
- West Detour: December 31, 2020;
- Effective date of the Mineral Resource estimates:
 - Zone 58N: December 31, 2020;
 - North Pit: December 31, 2020;
 - West Detour: July 26, 2021;
 - Detour Lake: July 26, 2021;
- Effective date of the Mineral Reserve estimates: December 31, 2020;
- Effective date of the financial analysis that supports the Mineral Reserves: December 31, 2020.

The overall Report effective date is taken to be the date of the updated Mineral Resource estimate for Detour Lake and West Detour and is July 26, 2021.

2.6 Information Sources and References

Reports and documents listed in Section 2.7, Section 3 and Section 27 of this Report were used to support preparation of the Report. Additional information was provided by Kirkland Lake Gold personnel as required.

Information pertaining to surface rights, royalties, environmental, permitting and social considerations, marketing and taxation were sourced from Kirkland Lake Gold experts in those fields as required.

2.7 Previous Technical Reports

Kirkland Lake Gold has previously filed the following technical report on the Project:

- Leite, A., Dupont, J.F., Raizman, V., and Fournier, P.A., 2020: Detour Lake Operations, Ontario, Canada, NI 43-101 Technical Report: technical report prepared for Kirkland Lake Gold, effective date 30 December, 2020.

The following reports were filed by Detour Gold Corporation (Detour Gold):

- Kallio, E.A., 2006: Technical Report for the Detour Lake Mine Option Property: technical report prepared for Detour Gold Corporation, effective date 21 September, 2006;
- Risto, R., Breede, K., el Rassi, D., and Kociumbas, M.W., 2008: Technical Report and Mineral Resource Estimate for the Detour Lake Mine Option Property, Ontario: technical report prepared for Detour Gold Corporation, effective date 25 January, 2008;

- Risto, R., Breede, K., Live, P., Castro, L., and Melis, L., 2008: Technical Report and Mineral Resource Estimate Update for the Detour Lake Mine Option Property, Ontario: technical report prepared for Detour Gold Corporation, effective date 18 August, 2008;
- Desautels, P., and Zurowski, G., 2009: Technical Report and Mineral Resource Estimate on the Block A Property, Ontario, Canada: technical report prepared for Trade Winds Ventures Inc. and Detour Gold Corporation, effective date 9 July, 2009;
- Crépeau, R., Brimage, D., Allaire, A., Jacobs, C.A., Houde, D., Li, D., Nakai-Lajoie, P., Live, P., Dagbert, M., Melis, L.A., Saucier, G., Noack, G., and Daniel, S.E., 2009: Technical Report, Pre-Feasibility Study of the Detour Lake Project, Ontario: technical report prepared for Detour Gold Corporation, effective date 19 October, 2009;
- Allaire, A., Dagbert, M., Daniel, S.E., Laferrière, A., Li, D., and Live, P., 2010: Technical Report, Feasibility Study of the Detour Lake Project, Ontario: technical report prepared for Detour Gold Corporation, effective date 30 June, 2010;
- Allaire, A., Dagbert, M., Laferrière, A., and Live, P., 2011: Technical Report, Mineral Resource and Mineral Reserve Update of the Detour Lake Project, Ontario: technical report prepared for Detour Gold Corporation, effective date 15 March, 2011;
- Ritchie, D.G., Allaire, A., Live, P., Dagbert, M., and Dupéré, M., 2012: Detour Lake Mine – NI 43-101 Technical Report: Detour Lake Updated Mine Plan NI 43-101 Technical Report: technical report prepared for Detour Gold Corporation, effective date 18 October, 2012;
- Allaire, A., Live, P., Dupéré, M., Camus, Y., and Ritchie, D.G., 2014: technical report prepared for Detour Gold Corporation, effective date 4 February, 2014;
- Anwyll, D., Croal, A.G., McMullen, J., and Ritchie, D.G., 2016: Detour Lake Mine – NI 43-101 Technical Report: technical report prepared for Detour Gold Corporation, effective date 25 January, 2016;
- Anwyll, D., Bassotti, M., Daigle, P., Janusauskas, D., McMullen, J., Sirois, R., and Wallin, R., 2018: Detour Lake Operation, Ontario, Canada, NI 43-101 Technical Report: technical report prepared for Detour Gold Corporation, effective date 27 June, 2018.

The following reports were filed by Pelangio Mines Inc. (Pelangio):

- Kallio, E.A., 2005: Technical Report for the Detour Lake Mine Option Property: technical report prepared for Pelangio Mines Inc., effective date 10 May, 2005;

- Kallio, E.A., 2006: Technical Report for the Detour Lake Mine Option Property: technical report prepared for Pelangio Mines Inc., effective date 21 September, 2006;
- Risto, R., Breede, K., el Rassi, D., and Kociumbas, M.W., 2008: Technical Report and Mineral Resource Estimate for the Detour Lake Mine Option Property, Ontario: technical report prepared for Pelangio Mines Inc., effective date 25 January, 2008;
- Risto, R., Breede, K., Live, P., Castro, L., and Melis, L., 2008: Technical Report and Mineral Resource Estimate Update for the Detour Lake Mine Option Property, Ontario: technical report prepared for Pelangio Mines Inc., effective date 18 August, 2008.

The following reports were filed by Trade Winds Ventures Inc. (Trade Winds):

- Desautels, P., 2009: Technical Report and Mineral Resource Estimate on the Gowest Property, Ontario, Canada: technical report prepared for Trade Winds Ventures Inc., effective date 28 April, 2009.
- Desautels, P., and Zurowski, G., 2009: Technical Report and Mineral Resource Estimate on the Block A Property, Ontario, Canada: technical report prepared for Trade Winds Ventures Inc. and Detour Gold Corporation, effective date 9 July, 2009;
- Desautels, P., Zurowski, G., and Holloway, A., 2011: Technical Report and Mineral Resource Update on the Block A Property, Ontario, Canada: technical report prepared for Trade Winds Ventures Inc., effective date 14 February, 2011.

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3.0 Reliance on Other Experts

This section is not relevant to this Report.



4.0 Property Description and Location

4.1 Introduction

The Project is situated approximately 300 km northeast of Timmins and 185 km by road northeast of Cochrane.

The Project centroid is at approximately 590,000mE 5,540,000mN NAD 83 Datum, Zone 17 within NTS areas 32E13.

The Detour Lake open pit mine is centered at UTM 594000E, 5542000N (NAD 83 Zone 17).

4.2 Property and Title in Ontario

This section provides a general overview of mineral-related law and title in Ontario, sourced from public domain documentation, including Natural Resources Canada (2015), The Fraser Institute (2020), Norton Rose Fulbright, (2013), and the Ontario *Mines Act* (1990).

4.2.1 Introduction

Until 1913, surface rights and mineral rights were acquired with land purchase. At that time, the Ontario Government enacted legislation reserving land mineral rights to the Crown and granting leases to individuals or companies seeking to extract minerals. Where mineral rights are privately owned due to granting prior to 1913, they can be sold independently of surface rights, so that surface and mineral rights on the same property can be held by different owners.

The Ministry of Energy, Northern Development and Mines (ENDM) and the Ontario Ministry of Natural Resources and Forestry (MNRF) act as the two main regulatory bodies that have combined into Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF). The Canadian Federal Government may also be involved in the mining process where First Nations matters arise, or where the subject lands are federally regulated such as when the lands are classified as navigable bodies of water.

4.2.2 Mineral Tenure

Mining Claim

Historically, a mining claim was a square or rectangular area of open Crown land (land that belongs to the Province of Ontario) or Crown mineral rights that a licenced prospector marks out with a series of claim posts and blazed lines which could range in size from 16 ha (a one-unit claim) to 256 ha (a 16-unit claim).

The mining claims in the Sudbury area are administered under Mining Act, R.S.O. 1990, c. M.14 as well as several regulations thereunder.

Mining Lease

A mining claim can be converted into a mining lease. To convert a mining claim into a lease an application letter must be submitted to the Provincial Recording Office's Technical Services Unit any time after the fifth unit of assessment work has been performed (cash payment may be made in lieu of the second to fifth unit of assessment work) on the land and the work has been submitted and approved. After submitting the application letter, the land covered by the mining claims must be surveyed. The applicant may also request that the surface rights be included in the Mining Lease where the surface rights are held by the Crown. Where the surface rights are privately held, the lessee of the mineral rights may need to acquire the surface rights if required for development or production purposes.

A lease grants its owner title and ownership to the land, permits the extracting and sale of extracted resources and removes the requirement to perform yearly assessment work.

To maintain a lease, rent must be paid annually. A lease expires after 21 years but can be renewed if the lease-holder can demonstrate continuous production of minerals for at least one year since the issuance or if the lease-holder can show that it has taken a reasonable effort to bring the property into production. A mining lease can also be renewed on the basis of contiguity with other mining leases where production has occurred.

A mining lease cannot be transferred or mortgaged by the lessee without the prior consent of the NDMNRF. Transfers require the lessee to submit various documentation and pay a fee.

Patented Claims

The owner of freehold lands in Ontario holds a fee-simple real property interest. Historically, the holder of a mining claim interested in removing minerals from the ground could, instead of obtaining a mining lease, apply to the NDMNRF to acquire the freehold interest in the subject lands through the granting of a mining patent.

Such patents can include surface and mining rights, or may only comprise mining rights. They give the patentee all of the Crown's title to the subject lands and to all mines and minerals relating to such lands, subject to any reservations set out in the patent. Patented claims are subject to annual Ontario mining taxes and, where surface rights are held, Ontario mineral land taxes.

No regulatory consent is required for the patentee to transfer or mortgage those lands other than *Planning Act* approval where the transferred lands are adjacent to other lands held by the same party.

Mining Licence of Occupation

These mining licences of occupation allow the holder to use the land in the manner specified in each licence, including the right to dig, excavate and remove ores and minerals from and under the land. The Province of Ontario has the right to revoke licences of occupation on 30 days prior notice.



4.2.3 Ontario Modernizing the Mining Act Process

Information in this section was derived from the NDMNRF website, and the QP has not independently verified the information.

Ontario has fully implemented the third phase of the Ontario government's Modernizing the Mining Act (MAM) process. This phase:

- Moves Ontario's mining lands administration systems from ground staking and paper map staking to online registration of mining claims
- Creates an online Mining Land Administration System (MLAS) that enhances client access to Ontario's mining lands data and improves their ability to manage their files online.

On April 10, 2018, Ontario converted Ontario's manual system of ground and paper staking, and maintaining unpatented mining claims to an online system. All active, unpatented claims were converted from their legally defined location by claim posts on the ground or by township survey to a cell-based provincial grid. Mining claims are now legally defined by their cell position on the grid and coordinate location in the MLAS Map Viewer. These changes bring greater accuracy and certainty to the location of mining claims, greater certainty of rights and interests, as well as flexible management of land assets.

Annual assessment work requirements remain unchanged, despite new cell sizes being 11% to 50% larger than the size of traditional claim units. Assessment work requirements are C\$400 per cell claim and C\$200 per boundary claim or any claim that is encumbered. Where work has not been completed ahead of the due date, claims forfeit to the Crown.

Under the MLAS system, registering a mining claim is now completed by paying a single registration fee of \$50 per cell.

4.2.4 Surface Rights

Surface rights refer to any right in land that is not a mining right. The process of acquiring surface rights for mining purposes depends on the owner of the rights:

- If the surface rights are owned by the claim holder, then no action is required
- If the surface rights are owned by the Crown, then the ownership of the surface rights will be granted to the claim holder during the lease application process as requested by the claim holder
- If the surface rights are privately owned by an individual or company, then an agreement to allow the claim holder to use the land must be made with the surface rights holder. The agreement should outline the compensation given if the land covered by the surface rights sustains any damages.

Confirmation of an agreement with the surface rights owner is required for grant of a mining lease, or an order of the Mining Lands Commissioner indicating that surface rights compensation, if any, has been paid, secured or settled must be provided.



4.2.5 Environmental Considerations

The Ontario *Environmental Assessment Act* is the legislation most often applied to environmental aspects of mining projects in Ontario. Mining project components may also be subject to the Federal Canadian Environmental Assessment Act.

Projects that are directly undertaken by a public agency; are undertaken on their behalf to fulfill a public agency responsibility or involve a public agency resource (for example, use of Crown lands, funding from a government agency, or impact on resources under government jurisdiction such as water bodies, fish habitat, timber or Mineral Resources) are required to follow an environmental assessment (EA) process. Both the Provincial and Federal EA acts generally apply. Both EA acts provide opportunities for varying levels of effort for conducting an EA, with the most intensive and longer-term processes required either for those projects that have the greatest potential to cause significant adverse environmental effects, or which are relatively unique, with perhaps the scope of potential impacts unknown.

A minimum amount of six months should be anticipated for completion of an environmental assessment, with a likely need of one year or more from the start of the process through to receipt of approval from the relevant agency.

4.2.6 Closure Considerations

All land affected by mining development activity must be rehabilitated after the activity has finished. A closure plan must be developed and acknowledged by the NDMNRF before mine development can begin. The plan outlines how the affected land will be rehabilitated and the costs associated with doing so. A financial guarantee equal to the estimated cost of the rehabilitation work is held in trust by the NDMNRF that is included with the submission of a closure plan.

4.2.7 First Nations Considerations

Section 35 of the Canadian Constitution Act, 1982, recognizes and protects Aboriginal and treaty rights in Canada. The Crown has a legal duty to engage in meaningful consultation whenever it has reason to believe that its decisions or actions might infringe upon recognized aboriginal or treaty rights.

NDMNRF has the responsibility for coordinating the Crown's consultation efforts on decisions relating to mining and mineral exploration. If the project requires approvals or decisions by other Ministries with mineral development regulatory authority, there will be a coordinated approach to the government's consultation with Aboriginal communities.

4.2.8 Fraser Institute Survey

Kirkland Lake Gold has used the Investment Attractiveness Index from the 2020 Fraser Institute Annual Survey of Mining Companies report (the Fraser Institute survey) as a

credible source for the assessment of the overall political risk facing an exploration or mining project in Ontario.

Kirkland Lake Gold used the Fraser Institute survey because it is globally regarded as an independent report-card style assessment to governments on how attractive their policies are from the point of view of an exploration manager or mining company, and forms a proxy for the assessment by industry of political risk in Ontario from the mining perspective.

Overall, Ontario ranked 20th out of the 77 jurisdictions in the survey in 2020 for investment attractiveness, 31st for policy perception, and 20th for best practices mineral potential.

4.3 Project Ownership

4.3.1 Ownership History

The original ownership interest was held by Amoco Canada Petroleum Company Ltd. (Amoco). In 1978, Amoco signed a joint venture (JV) agreement with Campbell Red Lake Mines (Campbell) and Dome Mines Ltd. (Dome). In 1987, Campbell, Dome and Placer Development merged to become Placer Dome Inc. (Placer). Placer acquired Amoco's interest in the JV.

In December 1998, Pelangio-Larder Mines Limited (Pelangio-Larder) and Franco-Nevada Mining Company Limited (Franco-Nevada) formed the Detour Lake Joint Venture and acquired the Mine Property from Placer Dome (CLA) Ltd. The Detour Lake Joint Venture also acquired certain parts of the Detour Exploration Lands surrounding the Mine Property pursuant to an assignment of the letter agreement dated as of September 28, 1998, between Pelangio-Larder and Placer.

Marl Resources Corp. (Marl Resources), the predecessor company to Pelangio Mines Inc. (Pelangio), acquired the majority of Pelangio-Larder's assets, including the Pelangio-Larder interest in the Detour Lake Joint Venture. Franco-Nevada's Project interest, due to merger and acquisition activity, passed to Newmont Mining Corporation of Canada Limited (Newmont).

In May 2002, Pelangio completed the purchase of all of Newmont's interest in the Detour Lake Joint Venture, subject to the retention of a 2% net smelter return (NSR) royalty retained by Newmont on the Mine Property and on certain claims staked by Pelangio (Blocks A to E). Newmont subsequently assigned its 2% NSR royalty to Franco-Nevada.

In June 2002, Pelangio purchased the Purchased Claims from a prospector subject to the retention of a 2% NSR by the selling prospector.

In September 2003, Pelangio granted Trade Winds Ventures Inc. (Trade Winds) an option to acquire a 50% interest in Block A, located immediately west of the Mine Property. Trade Winds earned a 50% interest in Block A on December 31, 2006.

Detour Gold was incorporated on July 19, 2006 to acquire the mineral tenures hosting the Detour Lake deposit, through a Purchase Agreement with Pelangio. All conditions set out in the Purchase Agreement, including the completion of an initial public offering, were

fulfilled on January 31, 2007, and the titles held by Pelangio were transferred to Detour Gold. A JV agreement with Trade Winds was signed on April 8, 2009.

The option on the Mine Property was exercised on October 30, 2008, when Detour Gold became the sole owner of all related surface rights, titles, and permits that were transferred from Goldcorp Canada Ltd. (Goldcorp), as successor to Placer Dome. In connection with the purchase of the Mine Property, Goldcorp held a 1% NSR on the Mine Property, which Detour Gold purchased for \$1 million in November 2012.

In September 2010, Detour Gold acquired the Aurora claims blocks from Conquest Resources, and entered into an Option and Joint Venture Agreement to acquire a 50% interest in Conquest's Sunday Lake claim block. The remaining interest in the Sunday Lake claims block was acquired in December 2014, giving Detour Gold a 100% interest in those claims.

In December 2011, Detour Gold acquired Trade Winds Ventures Inc., giving Detour Gold a 100% interest in the Block A and Gowest properties. Detour Gold amalgamated with its wholly-owned subsidiary Trade Winds effective January 1, 2014.

On January 31, 2020, Kirkland Lake Gold completed the acquisition of Detour Gold and Detour Gold became a wholly-owned subsidiary of Kirkland Lake Gold.

On January 2, 2021, Detour Gold was amalgamated with Kirkland Lake Gold Inc., a wholly-owned subsidiary of Kirkland Lake Gold and the amalgamated entity was renamed Kirkland Lake Gold Inc.

4.3.2 Current Ownership

The Project is wholly-owned by Kirkland Lake Gold Inc., a subsidiary of Kirkland Lake Gold.

4.4 Mineral Tenure

The 646 km² Project area forms one contiguous group of mining patents, mining leases and cell mining claims in the District of Cochrane, Ontario, with a small group of cell claims in Massicotte Township, Québec. The Detour Lake Operations are within the following mining leases and mining patents: LEA-109295, LEA-107399, LEA-109361, LEA-109040, LEA-107400, LEA-107392, LEA-108893, LEA-107394, LEA-107174, LEA-108269, LEA-109382, LEA-107398, LEA-107395, LEA-107396, LEA-107397, LEA-107393, LEA-107402, LEA-107397, LEA-107401, LEA-107404, PAT-5479, PAT-5477, PAT-5478, PAT-5482, PAT-5485, PAT-5484, PAT-5483, PAT-5481, PAT-5476, and PAT-5480.

A summary of the mineral tenure is provided in Table 4-1 and shown in Figure 4-1 and Figure 4-2.

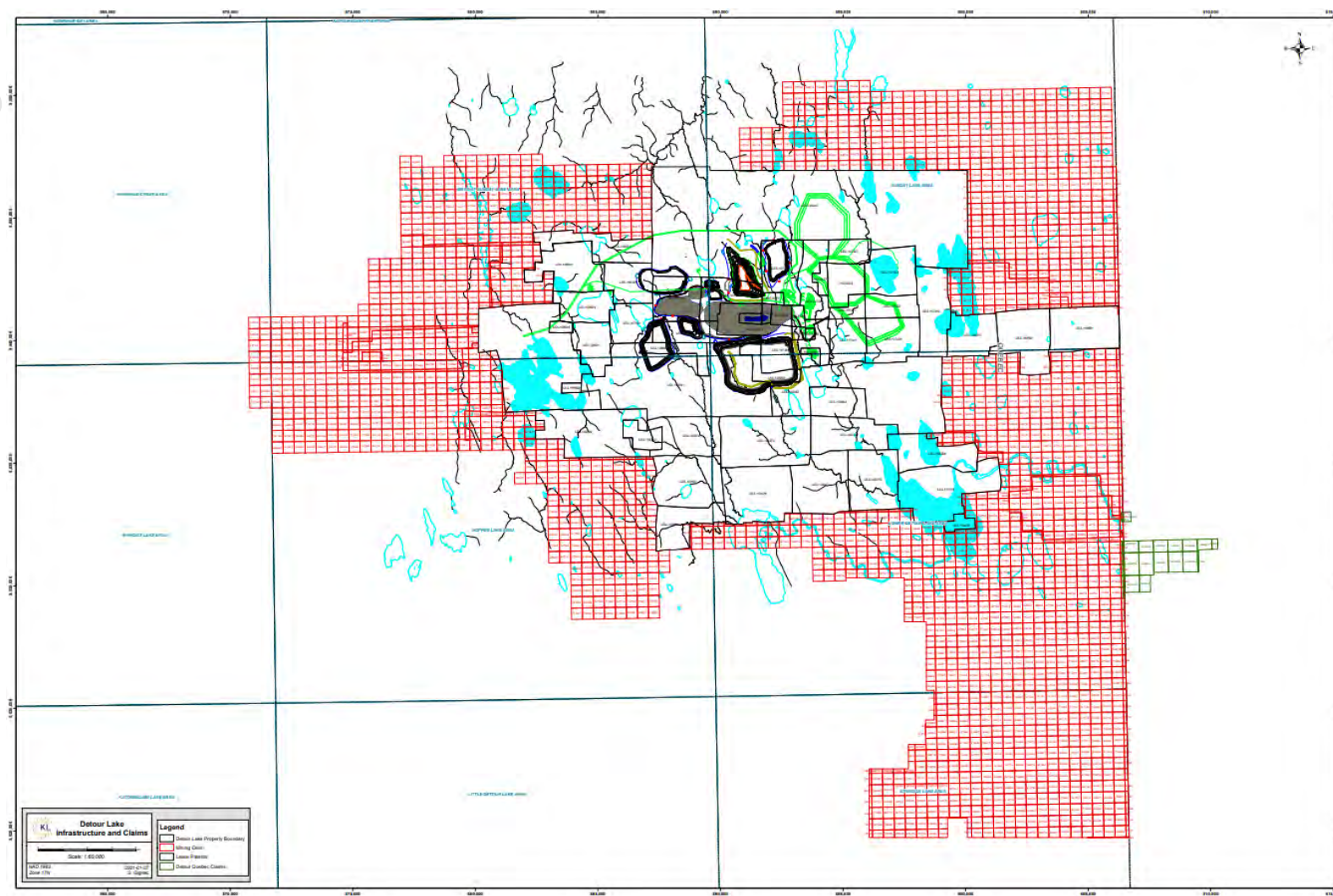
Appendix A contains the details of the individual mineral tenures, including location, area, expiry date and any associated royalties. More detailed location maps are provided with the claims tables in Appendix A.

Table 4-1: Mineral Tenure Summary Table

Description	Units	Area (ha)
<i>Ontario</i>		
Cell mining claims	2,213	39,714
Lease documents	44	23,712
Patent documents	6	602
<i>Québec</i>		
Claims	20	549
Total	2,283	64,577



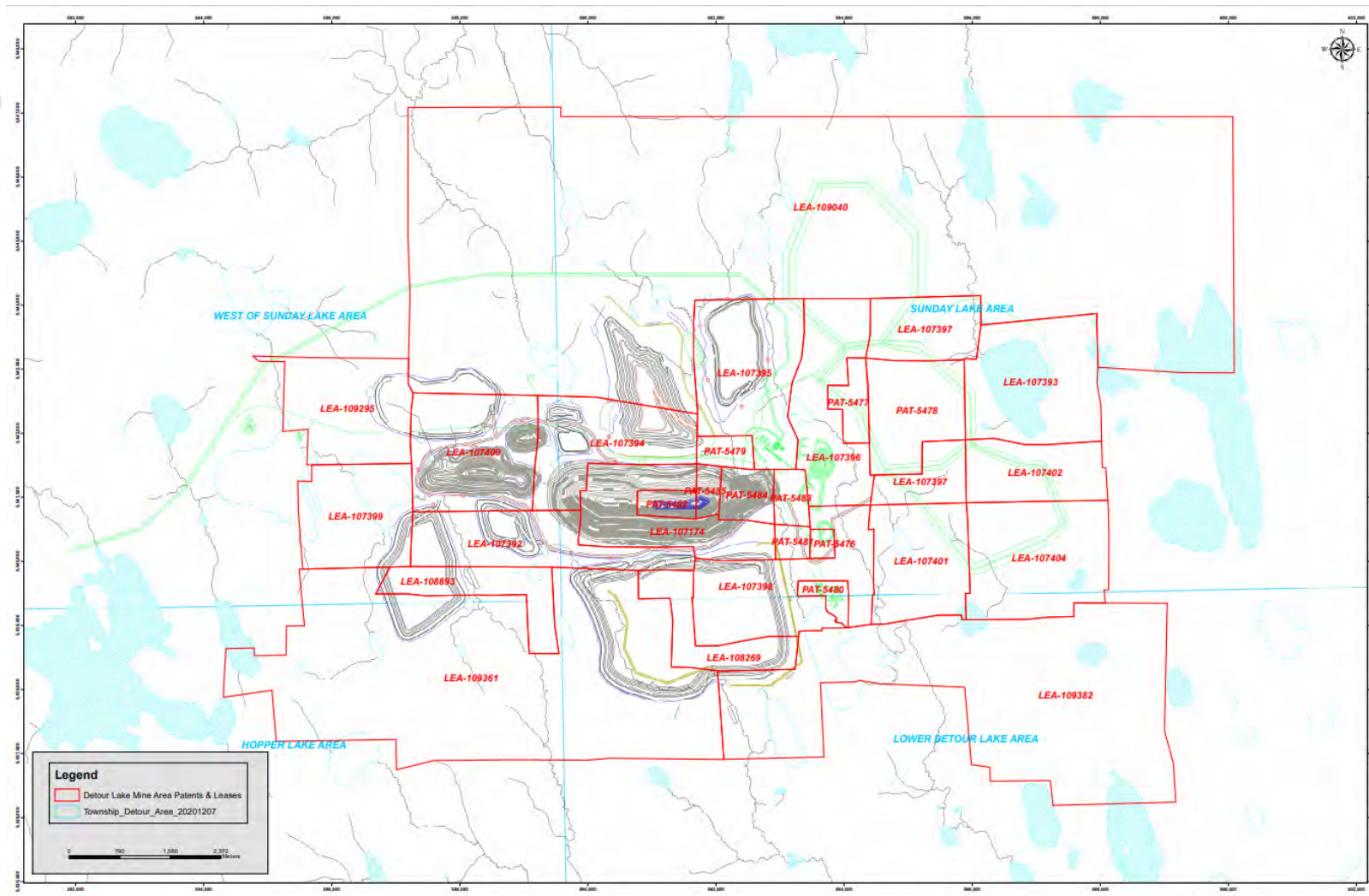
Figure 4-1: Mineral Tenure Summary Location Plan



Note: Figure prepared by Kirkland Lake Gold, 2020. Appendix A includes subset figures that more clearly show the individual claim numbers.



Figure 4-2: Detour Lake Operations Mining Lease and Mining Patent Location Plan



Note: Figure prepared by Kirkland Lake Gold, 2020. Appendix A has subset figures that explain the infrastructure shown.

4.4.1 Patented Documents

The patented parcels of land are the most secure form of land tenure and are subject to an annual mining tax payable to the Crown. The patented lands are described by the legal survey of individual mining claims and surveyed mining locations.

4.4.2 Leasehold Documents

The leasehold mining lands consist of 21-year mining leases issued for mining claims that were legally surveyed as individual mining claims or defined by the perimeter survey of groups of mining claims. Each perimeter survey is given a Certified Legal Manager (CLM) designation to describe the surveyed group of claims. Leaseholders are subject to an annual rental payable to the Crown. The *Mining Act* (Ontario) contains provisions for the renewal of 21-year mining leases. Applications for renewal are subject to review and consent by the NDMNRF.

4.4.3 Cell Mining Claims

Mining claims are legally defined by their cell position on the grid and coordinate location in the Mining Lands Administration System (MLAS) map viewer. The unpatented mining claims (cell mining claims) held by Kirkland Lake Gold do not confer any right, title, interest or claims in or to the mining claims other than the right to proceed as is in the *Mining Act* (Ontario).

Upon registering cell mining claims (cells), Kirkland Lake Gold must perform and file exploration assessment work and apply on those cells assessment work credits to maintain them in good standing. The first unit of assessment work of \$400 per 20 ha is required by the second anniversary date of the recording of the cell and an additional unit is required to be performed and filed for each year thereafter. Until a mining lease for the mining claims is issued, the Kirkland Lake Gold does not have the right to remove or otherwise dispose of any minerals found in, upon or under the mining claim.

4.4.4 Claims

A claim in Québec provides the stakeholder with a two-year right to explore within the claim holdings for any mineral substance with exceptions. After the initial two-year period claims can be renewed for an additional two-year term on certain conditions including that sufficient assessment work is performed on the claims or payment is made in lieu.

4.5 Surface Rights

Kirkland Lake Gold has 30 leases and 10 patents totaling 18,574.442 ha of surface rights on the Detour Lake Project. The patented lands are subject to a yearly annual mining tax payable to the Crown. The 21-year mining leases are subject to an annual rental payable to the Crown and applications for renewal are subject to review and consent by the MNDM. Fourteen leases totaling 4,679.946 ha will require renewal in 2023.

Kirkland Lake Gold's surface rights are sufficient for all the infrastructure and operation of the mine. The infrastructure included the construction of a 230-kV transmission line, a processing plant facility, various mine site buildings (mine services facility, bulk explosives plant, wash bay, fuel and lube island, etc.), a permanent camp, and new roads to connect the infrastructure buildings.

4.6 Water Rights

Kirkland Lake Gold does not exclusively hold water rights in the region. As part of the ongoing environmental compliance Kirkland Lake Gold is required to capture all site runoff from stockpiles and the open pits. Water taking from groundwater and freshwater sources is regulated by the Ontario Ministry of Environment, Conservation and Parks (MECP) via Permits to Take Water (PTTW). The Detour Lake Mine has a number of active PTTW, which are renewed at the required regulatory frequency in order to support activities over the life-of-mine (LOM). Since this water is required to be captured it puts the site water balance in a surplus over the LOM, providing sufficient water to be used for processing in the mill, with the excess being discharged to the environment under the permitted discharge conditions for the operations.

4.7 Royalties and Encumbrances

The Project is subject to the royalties listed in Table 4-2. Claim blocks that are subject to royalties are provided in Appendix A and are shown in Figure 4-3.

Kirkland Lake Gold has an option to acquire 50% of the royalty on the Gowest property at any time up to the date that is one year from the date from which "commercial production" commences on the Gowest property.

Prism Resources Inc. (Prism) claims it is entitled to a 7.5% net profit interest on the Aurora and Sunday Lake properties (the NPI). Kirkland Lake Gold disputes the claim made by Prism and has asserted that the NPI does not in fact exist. Prism commenced proceedings against Detour Gold Corporation in British Columbia and in August 2018 the Supreme Court of British Columbia declined to exercise jurisdiction and the proceeding was stayed. In April 2019, Prism filed a statement of claim against Detour Gold Corporation and applied for a summary judgement motion against Detour Gold Corporation. In April 2021 the Ontario Superior Court of Justice ruled in favour of Prism, asserting that the NPI is enforceable against Detour Gold Corporation. In May 2021, Kirkland Lake Gold filed an appeal of the summary judgement ruling issued by the Superior Court to the Ontario Court of Appeal. The appeal is scheduled for January 2022.

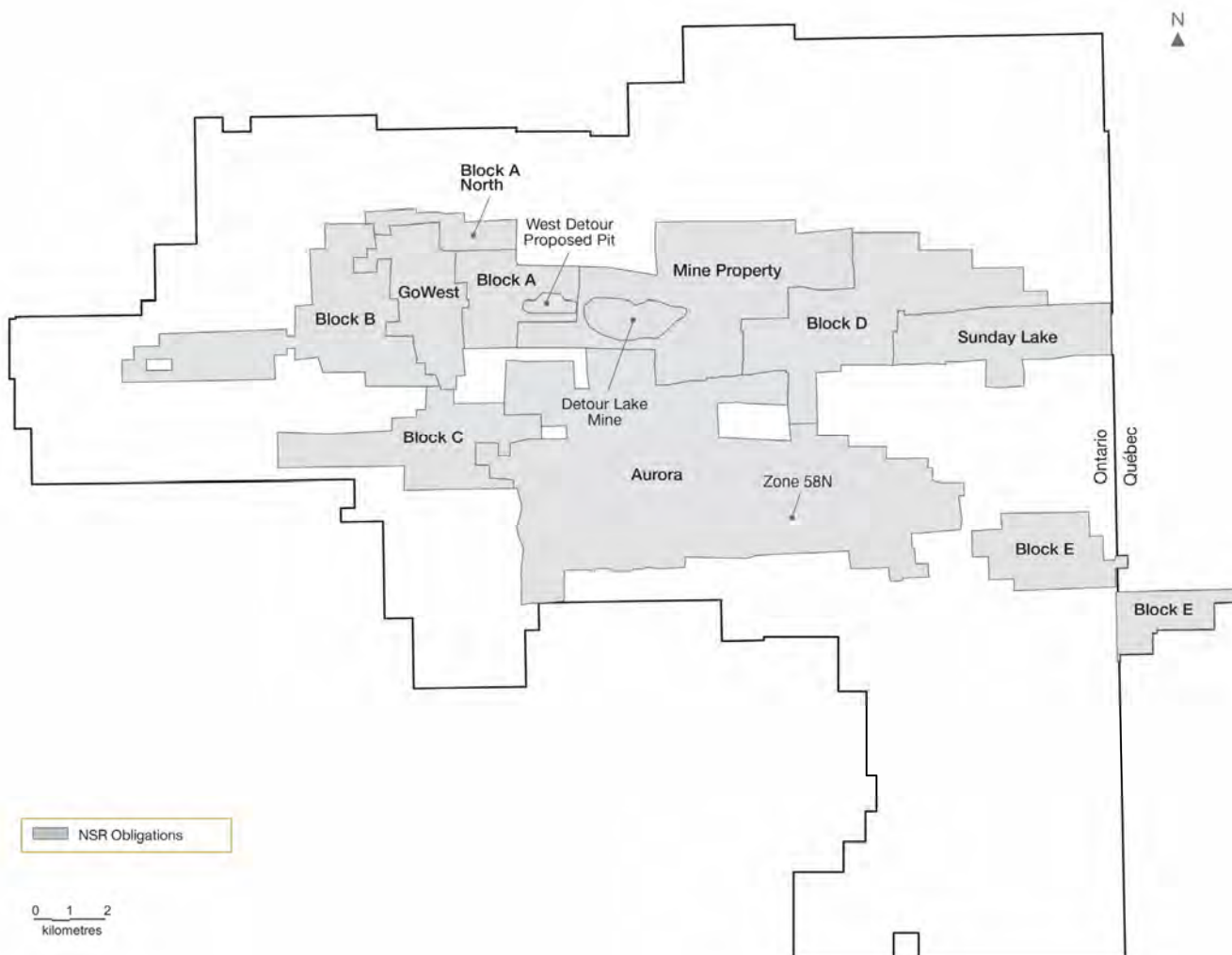
The Detour Lake Operations are not subject to any other back-in rights payments, agreements or encumbrances.



Table 4-2: Royalty Summary Table

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

Figure 4-3: Detour Lake Property Area Map Showing Areas with Royalty Payments



Note: Figure prepared by Kirkland Lake Gold, 2020

4.8 Permitting Considerations

Permitting considerations for operations are discussed in Section 20.

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

4.9 Environmental Considerations

Environmental considerations for operations are discussed in Section 20.

Current exploration liabilities consist with respect to the environment primarily consist of the potential for fuel and lubricant spills and the risk of fire during the drier months resulting from heavy equipment.

Liabilities and closure considerations associated with the current operations are provided in Section 20.

4.10 Social License Considerations

Social licence considerations for operations are discussed in Section 20.

4.11 Comment on Property Description and Location

To the extent known to the QP, there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the Project that have not been discussed in this Report.

5.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

5.1 Accessibility

From the town of Cochrane (population of approximately 5,000 residents), the Project is easily accessible by the Detour Lake Mine road, the northern extension of Highway 652. The first 151 km on Highway 652 is paved surface, followed by 34 km of well-maintained gravel surfaced road to the mine site. Road access is available year-round.

The closest major airport to the site is at Timmins, Ontario, approximately 61 km to the southeast.

Site access is controlled by a 24 hour a day manned security gate to prevent the general public accidentally accessing the active mining areas.

5.2 Climate

The climate in the Project area is characterized by cold winters and mild summers.

The mean annual temperature is estimated at 0.5°C, with average daily temperatures ranging from -18.7°C in January to 16.5°C in July.

The average total annual precipitation is estimated at 862 mm with approximately 30% falling as snow, and the greatest precipitation contribution occurring as rain during June through October.

The predominant wind direction is from the west.

Mining and exploration activities are conducted year-round.

5.3 Local Resources and Infrastructure

The closest settlement to the Project is the Town of Cochrane, Ontario.

The region benefits from a strong contractor and supplier base to the mining industry. Skilled labour and suppliers are readily available in Cochrane, Timmins, Kapuskasing, Iroquois Falls, and Kirkland Lake Gold.

Additional information on site infrastructure is provided in Section 18.

5.4 Physiography

Site topography is subdued with maximum local relief of approximately 30 m. The elevation ranges from approximately 260–288 metres above sea level. There is a pronounced north/south fluting of the landscape consistent with the general direction of the most recent glaciations in this area.

Areas of higher relief are sparsely wooded with jack pine, black and white spruce, balsam fir, trembling aspen, and white birch. Areas that are slightly lower in relief are poorly drained and characterized by muskeg.

There is very little bedrock outcrop and much of the Project area is overlain by thick accumulations of glacial material that includes till and glaciofluvial material (poorly sorted sand with lenses of gravel).

Numerous small streams linking elliptical lakes and ponds, generally oriented parallel to the pattern of glacial fluting. Numerous small and shallow lakes are found within the Project area, the largest being Sunday Lake, with a surface area of approximately 2.8 km².

5.5 Sufficiency of Surface Rights

There is sufficient surface area for the open pits, waste rock storage facilities (WRSFs), plant, TMA; (cells one, two and three), associated infrastructure, and other operational requirements for the LOM and mine plan discussed in this Report.

6.0 History

6.1 Exploration History

The exploration history is summarized in Table 6-1.

6.2 Production History

During the initial 17-year mine life from 1987–1999, production is estimated at 1.7 Moz Au from about 14.3 Mt grading 3.82 g/t Au, with mill recovery averaging 93.1%.

Production during the Detour Gold ownership period (2013–30 January 2020) is estimated at 3.6 Moz Au from about 135.5 Mt grading 0.90 g/t Au, with mill recovery averaging 90.1%.

Production since Kirkland Gold became Project operator is provided in Table 6-2.

Table 6-1: Exploration History

Year	Company	Work Completed
1974–1979	Amoco	Completed regional airborne geophysical surveys, ground Crone electromagnetic, RADEM and magnetometer surveys, drilling (335 core holes for 57,339 m in Mine Property area, 6 core holes for 986 m in Block A), decline construction, construction of a winter road, Mineral Resource estimate, and completion of a feasibility study in the Mine Property area. The feasibility study results were not encouraging and the property was offered for joint venture.
1978	Amoco, Campbell and Dome	JV agreement signed.
1979–1987	Campbell and Dome	Completed channel and rock chip sampling, surface and underground drilling, Mineral Resource and Mineral Reserve estimates in the Mine Property area. Open pit mining commenced in 1983 and was completed in 1987.
1983–1984	Global Energy Corporation	Option from Ingamar Exploration Ltd on Block A. Completed 15 drill holes. Narrow gold intersections returned from several closely spaced holes approximately 400 m north of Lindbergh Lake (west of the West Detour deposit).
1987–1999	Placer Dome Inc.	Merger between Campbell, Dome and Placer Development. Acquired Amoco's 50% property interest in 1988. Open pit mining briefly recommenced in 1998. Underground mining at Detour Lake commenced in 1987 and ran to 1999. Due to a combination of low metal prices and production and grade problems all mining ceased in 1999, and reclamation activities were initiated. Drilling in the period 1987–1998 consisted of 4,219 surface and underground holes (435,002 m). Placer Dome completed an additional 90,889 m in 283 core holes for exploration purposes on the Mine Property and 62,147 m in 133 holes in outlying areas.
1998	Pelangio-Larder/Franco-Nevada	Acquired the Mine Property from Placer Dome. Also acquired certain parts of the Detour Exploration Lands surrounding the Mine Property.
2000	Trade Winds	Marl Resources acquired the Pelangio-Larder interests. Franco-Nevada interest passes to Newmont.
2002	Pelangio	Completed the purchase Newmont's interest in the Detour Lake JV. Newmont retains 2% NSR, subsequently transferred NSR to Franco-Nevada.
2003	High River Gold Mines Ltd.	Pelangio and High River Gold Mines formed a strategic alliance whereby High River acquired 19% of Pelangio shares and provided technical expertise and operations management to Pelangio.
2003–2011	Trade Winds	Completed core holes (134,000) m in the Block A and Gowest properties. Drilling of 109,718 m in 329 holes at Detour West. Mineral resource estimate for West Detour deposit.
2004–2006	Pelangio	Completed drilling consisting of 127 core holes (29,769 m) and a Mineral Resource estimate assuming a combined underground and open pit operation.
2006–2019	Detour Gold	Purchase agreement with Pelangio in 2007 to acquire all Detour Lake assets, including Block A. Acquired Goldcorp (successor to Placer) interest in Mine Property in 2008. Concluded JV agreement with Trade Winds in 2009. Acquired Aurora property from Conquest Resources in 2010. Acquired Trade Winds and thereby a 100% interest in the Block A and Gowest properties. Purchased Goldcorp 1% NSR on the Mine Property for \$1 million in 2012. Obtained 100% interest in Sunday Lake Property in 2014. Completed geological mapping, mobile metal ion (MMI), bedrock grab and channel geochemical surveys, an amplified geochemical imaging soil gas survey,

Year	Company	Work Completed
		<p>age dating, airborne geophysical surveys, ground induced polarization (IP), infill drilling (541,087 m in 1,395 core holes at Detour Lake; 49,158 m in 156 core holes at West Detour), geotechnical, metallurgical and condemnation drilling, Mineral Resource and Mineral Reserve estimates, pre-feasibility and feasibility studies assuming open pit mining.</p> <p>Mine construction commenced in 2012, and commercial production was declared in 2013.</p> <p>Exploration core drilling included 12,054 m in 38 holes peripheral to the Detour Lake Mine in 2008; 5,025 m in 22 holes targeting the vicinity of Detour Lake Mine, the Sunday Lake Property and LDDZ (in the Lower Detour area) during 2011; 5,061 m in 17 holes targeting the Lower Detour area in 2012; 26,765 m in 80 holes targeting the Lower Detour area and Sunday Lake Property in 2013; 14,874 m in 40 holes targeting the Lower Detour area in 2014; 36,577 m in 72 holes targeting Zone 58N in the Lower Detour area in 2015; 52,079 m in 168 holes targeting Zone 58N and 17,434 m in 59 holes in Lower Detour and tailings management areas (TMA), and Massicotte claims during 2016, 35,212 m in 99 holes targeting Zone 58N and 1,155 m in 3 holes in TMA area during 2017.</p> <p>During 2019, Detour gold completed 41 core drill holes within the Lower Detour Property totalling 13,651 m.</p>
2020	Kirkland Lake Gold	<p>In 2020 during the acquisition period of Detour Gold by Kirkland Lake Gold Inc., 11 holes were drilled at 58N totaling 3,693 m.</p> <p>Kirkland Lake Gold commenced a large surface core program to look for mineralization extensions that could potentially support Mineral Resource estimation or upgrades to confidence categories, with 78 core holes with 6 wedge holes totalling 66,115 m drilled in 2020.</p> <p>In support of the core program, exploration offices were expanded, a new core logging facility was constructed to provide additional logging space, and laydown areas were expanded.</p> <p>The database was changed from Access to Fusion (a Datamine product) and logging is now performed using DH logger (an Access logging program).</p>
2021		<p>Updated Mineral Resource estimates; Updated Mineral Resource estimates; completed 247 core holes for 176,825.9 m of drilling to 30 September, 2021. Collected and submitted 7,757 samples from 69 core holes drilled in the West Detour area for geochemical (ICP) analysis.</p>

Table 6-2: Production History, Kirkland Gold

Year	Ore milled (Mt)	Grade (g/t Au)	Recovery (%)	Recovered Gold (koz)	Note
2020	21.1	0.83	91.4	516.8	Production from January 31 2020 to December 31 2020
2021	17.8	0.96	91.8	501.8	Production from 1 January 2021 to 30 September, 2021.



7.0 Geological Setting and Mineralization

7.1 Regional Geology

The regional geology description is summarized from Oliver et al., (2011).

The Project is located within the northwestern portion of the Abitibi Greenstone Belt, which lies, in turn, within the eastern part of the Wawa-Abitibi sub-province, a Neoarchean granite-greenstone sub province in the southern Superior Province of the Canadian Shield craton. The Abitibi Greenstone Belt consists of east–west-trending synclines of felsic to ultramafic volcanic rocks. Intervening domes are cored by syn-volcanic tonalite and gabbrodiorite rocks and alternate with east–west-trending bands of late tectonic turbiditic and conglomeratic sedimentary rocks. Most of the volcanic and sedimentary strata dip vertically and are commonly bound by abrupt, east–west-trending faults with varied dips.

The stratigraphy of the Abitibi Greenstone Belt is subdivided into earlier volcanic-dominated episodes that include the Pacaud assemblage (2770–2736 Ma), the Deloro assemblage (2730–2724 Ma), the Stoughton-Roquemaure assemblage (2723–2720 Ma), the Kidd-Munro assemblage (2719–2711 Ma), the Tisdale assemblage (2710–2704 Ma), and the Blake River assemblage (2704–2695 Ma). These sequences are unconformably overlain by turbidites and calc-alkaline volcanic rocks of the Caopatina assemblage (ca. 2700 Ma) in the north and the Porcupine assemblage (2690–2685 Ma) in the south. These units in turn are unconformably overlain by coarse clastic and alkaline volcanic rocks of the Opemisca assemblage (ca. 2692 Ma) in the north and the Timiskaming assemblage (2676–2670 Ma) in the south. A regional geology figure is included as Figure 7-1.

7.2 Project Geology

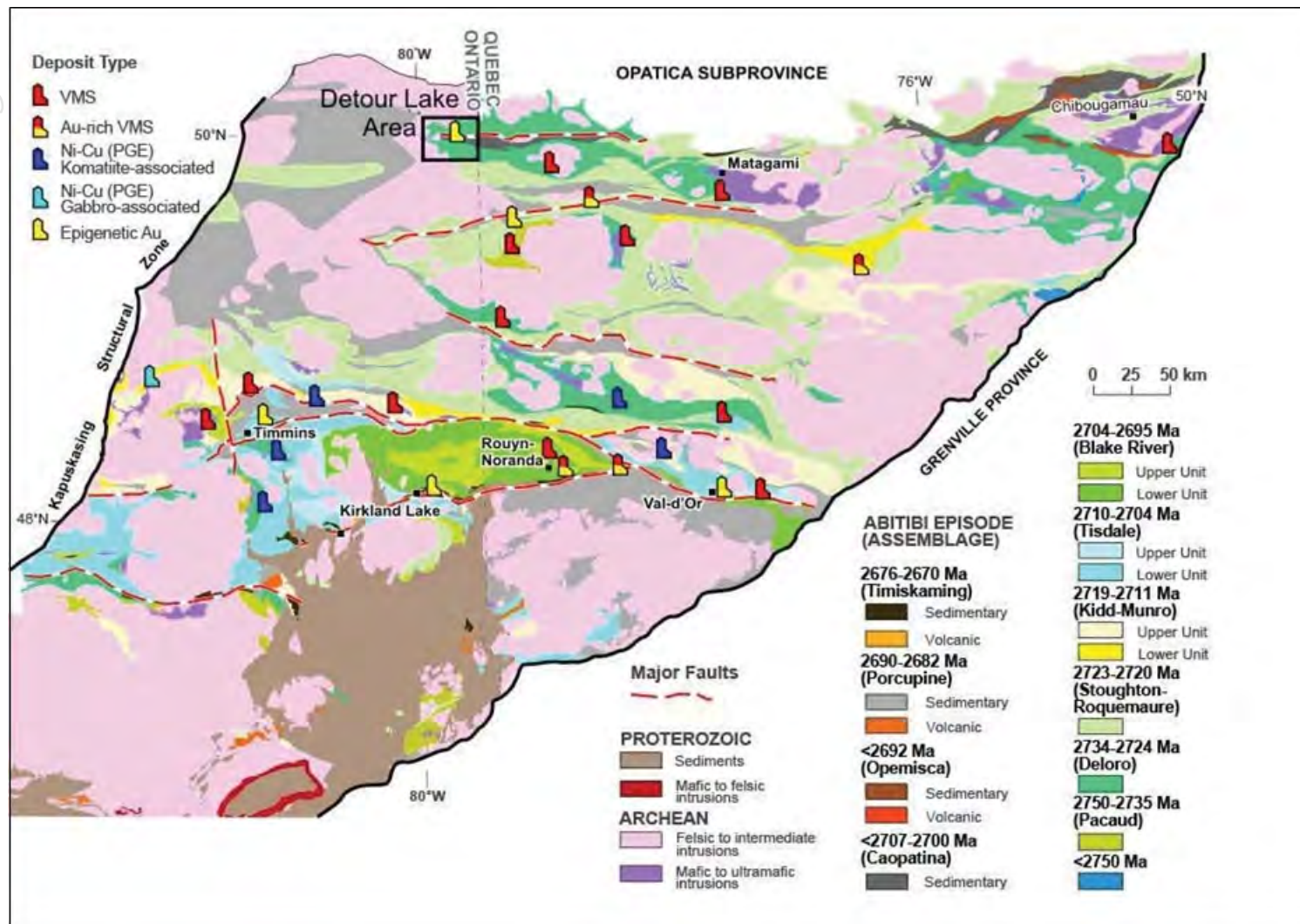
In the Project area, the greenstone–granite architecture is partially aligned and disrupted along a linear, east–west-trending belt that defines the position of the Sunday Lake Deformation Zone.

Supracrustal rocks within the Project area consist of a thick sequence of mafic to ultramafic lithologies, which are predominantly volcanic in origin, and are part of the Deloro assemblage. They occur within regional synclinal-anticlinal fold structures traced for over 30 km across the Project and are in structural contact to the south with the younger sediments of the Caopatina assemblage. These rocks are bounded to the north and west by the Opatika basement gneissic rocks. To the east and south, the Deloro assemblage is intruded by several large, weakly foliated granodioritic to tonalitic intrusions which are intersected by numerous local felsic to mafic dykes, sills and younger regional Proterozoic diabase dykes.

7.2.1 Lithologies

The major lithologies in the Project area are summarized in Table 7-1. A Project-scale geology plan is provided in Figure 7-2.

Figure 7-1: Regional Geology Plan



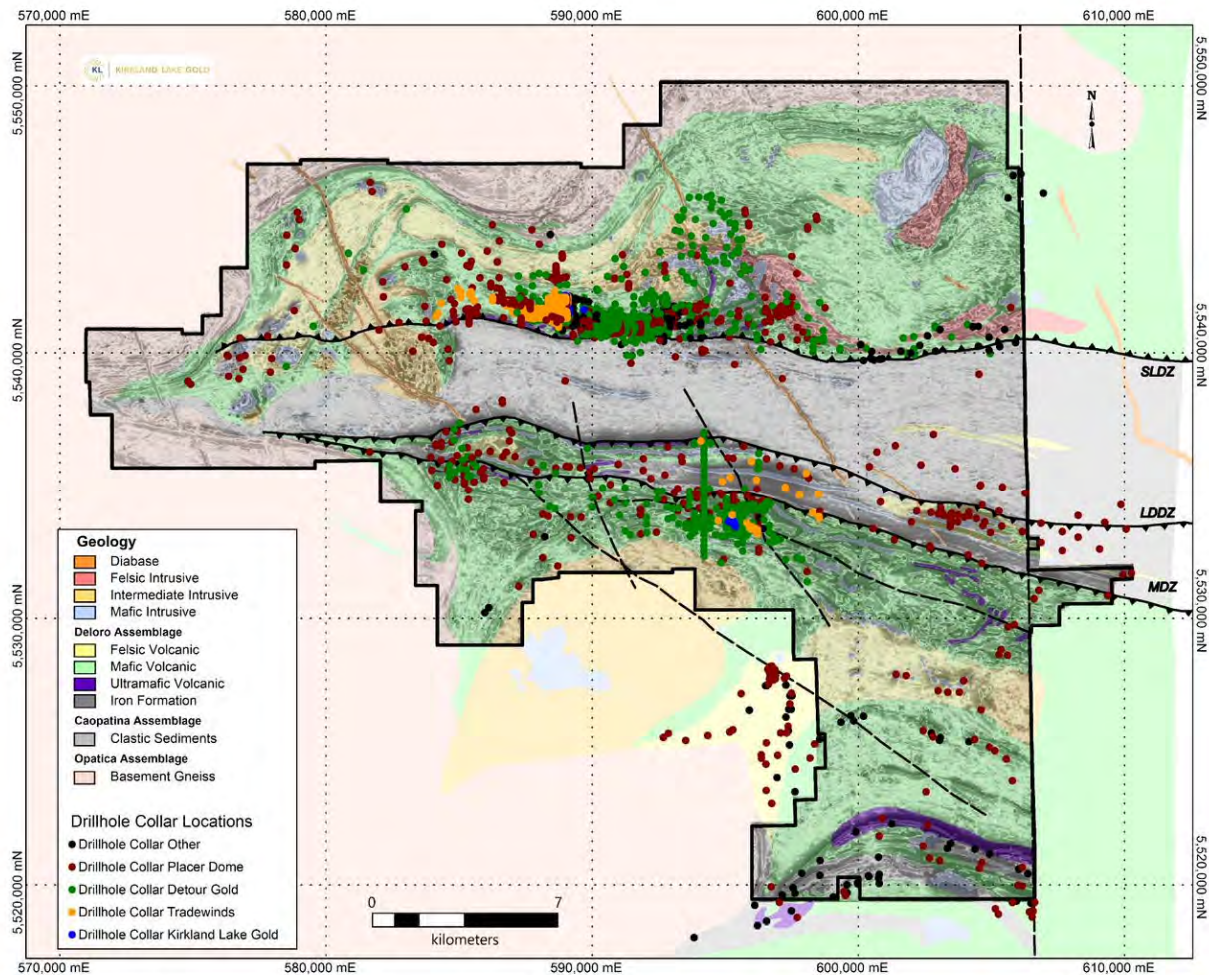
Note: Figure from Oliver et al., (2011).

Table 7-1: Lithology Table

Major Unit	Sub-Unit	Description	Comment
Tonalitic to granodiorite intrusions		Weakly foliated and distinctly tonalitic in composition. The intrusion shifts to a more granodioritic composition within 300 m of its contact.	
Felsic to mafic dykes		The dykes can have a variety of colours and textures ranging from light to dark coloured and aphanitic to feldspar porphyritic. Intermediate dykes are less common and are predominantly fine-grained and locally porphyritic. Most dykes have east-west trends, parallel to sub-parallel to the main foliation.	Intrude all earlier units
Caopatina assemblage		Poorly to well laminated metasedimentary unit (argillites, greywackes and quartz wackes) and mafic volcanoclastics	
Upper Detour Lake Formation	Chloritic greenstone	Mafic to ultramafic komatiitic volcanic rocks, strongly altered to chlorite or talc–chlorite schist	
	Amphibolite dykes (flow)	Lower strain mafic dykes or flows, concordant with the stratigraphy.	The amphibolite units generally occur at the base of the first two pillow flow sequences north of the Sunday Lake Deformation Zone and show less pervasive mineralization and alteration than the adjacent flows.
	Massive flows	Grey; fine to medium grained with local porphyritic texture; weak to moderately foliated. Pillow-structure, hyaloclastite and vesicles filled by calcite may be present locally	Several very massive magnesium-rich tholeiitic flow sequences are present in the hanging wall sequence of the Detour Lake Mine and West Detour deposit
	Pillow flows	Fine to medium-grained; usually shows foliation. Characterized by pillow selvages, the formation of hyaloclastite, and vesicles filled by calcite	Common throughout the Detour Lake Mine and West Detour areas
Lower Detour Lake Formation	Mafic sills and dykes	Abundant mafic (gabbroic) intrusions, finer-grained flows, and dykes	Mafic intrusions may be strongly magnetic
	Megacrystic diorite	Megacrystic diorite sill	
	Mafic volcanic	Dense green–black flow unit	Lies to the south of the talc–chlorite alteration zone of the Detour Lake Mine
	Ultramafic flows and sills	Thick sequence of ultramafic flows, with locally-preserved spinifex textures, coarse-grained pyroxenites, and fine-grained ultramafic sills.	Conformable contact relations with the other volcanic units. Not observed in the West Detour deposit.

Major Unit	Sub-Unit	Description	Comment
	Mafic flow contact unit (chloritic schist)	5–20 m-thick flow unit, fine grained, light to dark greenish black; commonly overlies ultramafic rocks	Is present on both the footwall and hanging wall sides of the chert marker horizon
	Chert marker horizon	Thin (0.5–2.0 m thick), cream to buff, locally laminated, and commonly strongly sulphidized felsic rock.	May represent deformed tuffaceous or volcanoclastic rocks, which mark the transition from ultramafic- to mafic-dominated volcanism in the Detour Lake Formation. Not observed in the West Detour deposit.

Figure 7-2: Project Geology Map



Note: Figure prepared by Kirkland Lake Gold, 2020. SLDZ = Sunday Lake Deformation Zone; MDZ = Massicotte Deformation Zone; LDDZ = Lower Detour Deformation Zone.



The Deloro Assemblage, north of the SLDZ, is sub-divided into the Upper Detour Lake Formation, a volcanic assemblage dominated by tholeiitic basalt (mainly high-Mg massive and high-Fe pillowed flows); and the Lower Detour Lake Formation, an ultramafic-dominant komatiitic and high-Mg tholeiitic volcanic and intrusive assemblage.

Where the komatiitic lithologies are in contact with the Sunday Lake Deformation Zone, they are highly deformed and altered into talc–chlorite schist. The contact is highly mylonitized, mineralized and silicified and hosts a strongly deformed felsic to intermediate dyke-like body known locally as the “chert marker horizon”.

The chert marker horizon is not a chert unit, but rather a fine-grained felsic volcanoclastic unit and/or a series of intensely silicified and sulphidized volcanic rocks and intermediate sills and dykes. It occurs between mafic-dominated volcanic rocks of the Upper Detour Formation (hosts hanging wall mineralization) and ultramafic volcanic rocks of the Lower Detour Formation (hosts footwall mineralization).

7.2.2 Structure

The major structural feature is the 30 km-long Sunday Lake Deformation Zone, an east–west-trending, steeply north-dipping deformation corridor. The zone marks the northern contact between the Caopatina assemblage sedimentary rocks and the underlying Deloro assemblage volcanic rocks. Mineralization at Detour Lake and West Detour is spatially related to Sunday Lake Deformation Zone structures.

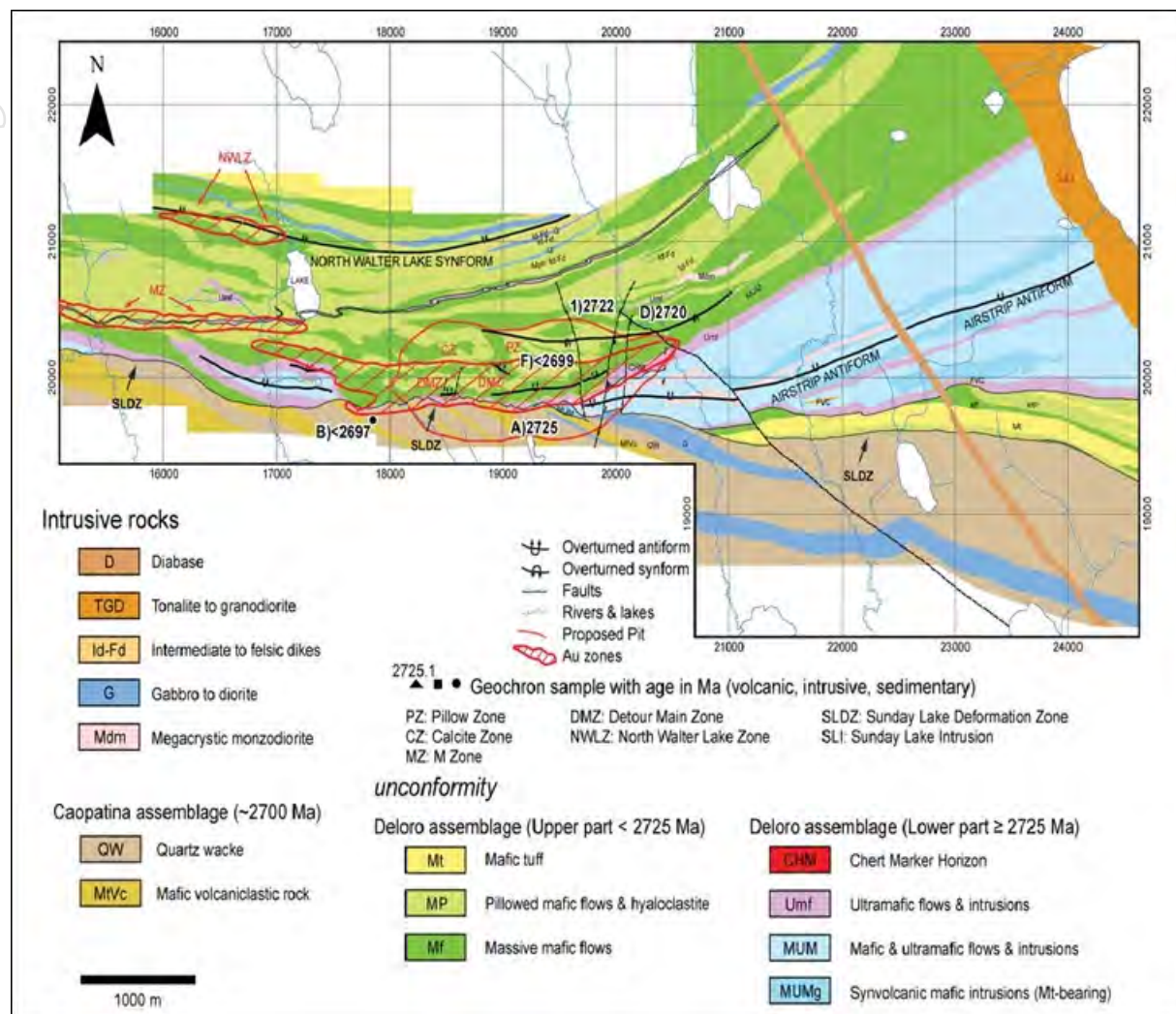
Kinematic indicators confirm sinistral–reverse north over south motion along the Sunday Lake Deformation Zone. A regional east–west trending structure, the Massicotte Deformation Zone is recognized several kilometres to the south of the Sunday Lake Deformation Zone and extends for over 30 km in strike length. It marks the southern contact between the Caopatina assemblage sedimentary rocks and the underlying Deloro assemblage volcanic rocks.

The third major structure is the Lower Detour Deformation Zone, a 30 km long, east–west-trending, and steeply south-dipping one that separates Caopatina assemblage sedimentary rocks and the underlying Deloro assemblage volcanic rocks. The 58 North Zone (58N) occurs immediately south of the Lower Detour Deformation Zone.

The youngest structures are a series of 120–145° trending faults, which are locally intruded by Proterozoic-age diabase dykes.

Two east-trending synform–antiform pairs are developed in the volcanic assemblage, the North Walter Lake Synform and the Airstrip Antiform (Figure 7-3). These folds are tight, upright, slightly overturned, and south-facing. A later fold set consists of broad open folds that have axial traces striking at approximately 145°, and plunging 10–35° to the northwest. The inter-limb distances of these folds are approximately 8–12 km.

Figure 7-3: Local Structural Setting



Note: Figure from Oliver et al., 2011.

7.2.3 Metamorphism

All rock units have undergone upper greenschist to lower-grade amphibolite metamorphism.

7.2.4 Alteration

All lithological units are hydrothermally altered proximal to major deformation zones.

Strong secondary biotite is developed in mafic rocks. Talc–actinolite chlorite assemblages formed in ultramafic sills next to the chert marker horizon and across the northern edge of the Detour Lake deposit and through the West Detour deposit. The footwall magnesium-rich komatiitic volcanic rocks show alteration to schistose rocks with a mineral assemblage of chlorite–talc–calcite–tremolite/actinolite–biotite. Silicification may overprint the biotite alteration or occur as an intense pinkish halo with associated potassic feldspar flooding.

7.2.5 Mineralization

There are two recognized episodes of gold mineralization at the Detour Lake and West Detour deposits.

The first episode consists of a wide and generally auriferous sulphide-poor quartz vein stockwork formed in the hanging wall of the Sunday Lake Deformation Zone. The sulphide-poor quartz vein stockworks observed in the hanging wall have sub-vertical north or south dips and are parallel to a series of east-west trending high strain zones. These veins form a weak stockwork and are boudinaged and/or folded.

The second episode is a stage of gold mineralization overprinting the early auriferous stockwork, principally in the hanging wall of the Sunday Lake Deformation Zone, with a higher sulphide content. The sulphide-rich gold mineralization predominantly fills structural sites in deformed quartz veins, fractures and veins crosscutting the foliation fabric but also in pillow breccias and selvages. The distribution of sulphide-rich mineralization is strongly controlled by the geometry of kinematic orientation (i.e., pyrite and pyrrhotite concentrations have a shallow westerly plunge similar to the plunge of the main flexure zone in the Sunday Lake Deformation Zone at an angle of about 40° (in the area of the former Campbell pit), shallowing to approximately 10° further to the west).

7.3 Deposit Descriptions

7.3.1 Detour Lake

Dimensions

Mineralization at Detour Lake is hosted within a broad corridor. In mine grid coordinates the mineralization extends from 16,900E to 20,650E, 19300N to 20,650N and 5,500 m



elevation to 6,300 m elevation. This corresponds to a strike extent of 3.75 km, a width of 1.35 km, and an approximate elevation range of 800 m.

Lithologies

Mineralization is hosted within a broad assemblage of mafic volcanic rocks with an overall east–west trend. Detour Gold had drill tested this mineralized corridor for a distance of over 5 km, west from the former Campbell pit. The bulk of the mineralization within this corridor is concentrated along a highly-strained corridor of a moderate to strong potassic alteration envelope at the contacts between pillowed and massive mafic flows.

At the eastern end of this corridor at the Detour Lake Mine is the Main Zone. The Main Zone was the largest gold-bearing mineralized zone and consisted of gold mineralization occurring in the chert marker horizon or in quartz and quartz-carbonate vein systems splaying from the Sunday Lake Deformation Zone. Historic quartz zones Q50, Q70, Q100, and Q120 zones were typical quartz veins arrays splaying off the Sunday Lake Deformation Zone into the hanging wall.

The former Campbell open pit is located at the shallowest zone developed along the contact between massive Mg-rich tholeiitic and pillowed Fe-rich tholeiitic volcanic rocks.

West of section 19,620E, the mineralization mainly straddles the lower massive flow-pillow flow contact and is commonly associated with increased biotite alteration. Mineralization is generally well distributed within this sequence but lithological changes to coarser and massive facies may locally affect mineralization continuity.

From sections 16,160E to 17,160E, Placer Dome intersected the QK Zone along a massive flow-pillow flow contact between 600–750 m below surface.

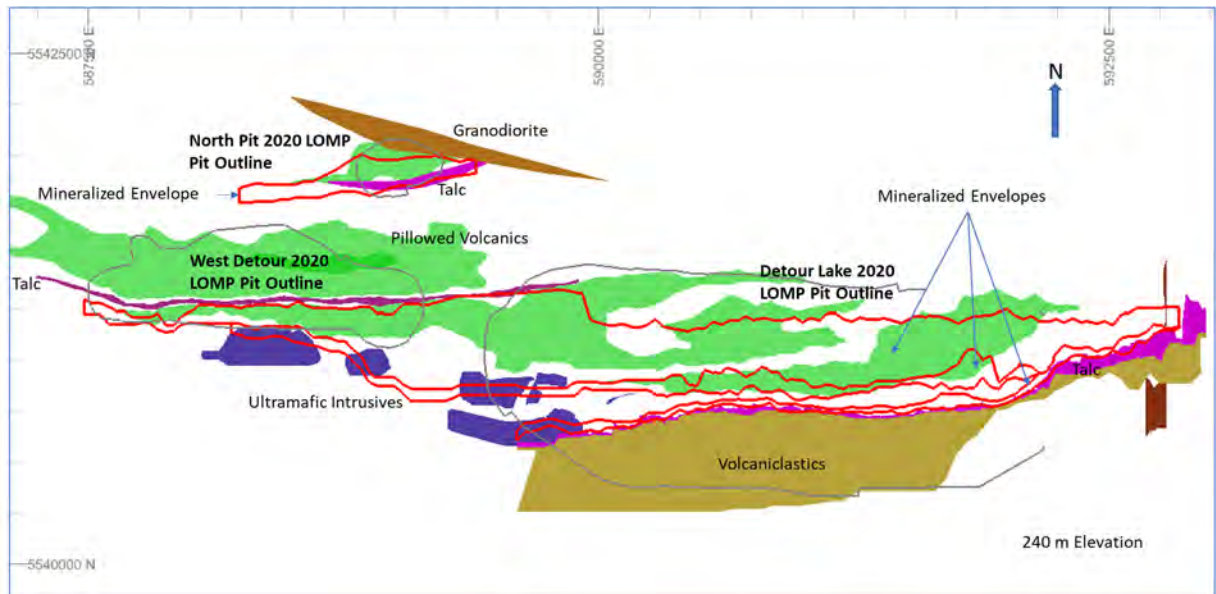
A geology plan is included as Figure 7-4, and geological cross-sections in Figure 7-5 to Figure 7-7.

The Main Zone mineralization, the focus of historical underground mining, strikes easterly to northeasterly, has an average dip of 70°N. It has a plunge of 40°W near surface, flattening out to 0° below the 660 m level. The hanging wall contact is irregular, resulting from diverging quartz vein structures. The footwall contact is more regular and undulates with local dips varying from 30° to near vertical. The Quartz Hangingwall Zones strike at azimuth 080° with a vertical to near vertical dip, and a plunge of 45°_W parallel to the Main Zone.

The Main Zone extends to a depth of 745 m, is open to the west along strike, and dips north at an average of 70°. The Quartz Hangingwall Zones, also the subject of historical underground mining, are characterized by discrete groups of steeply- dipping (predominately north) quartz veins. Generally having widths of 3–5 m, these quartz zones appear to splay off the chert marker horizon, although it is difficult to trace these zones directly back to the chert. Potassic alteration is locally associated with these zones.

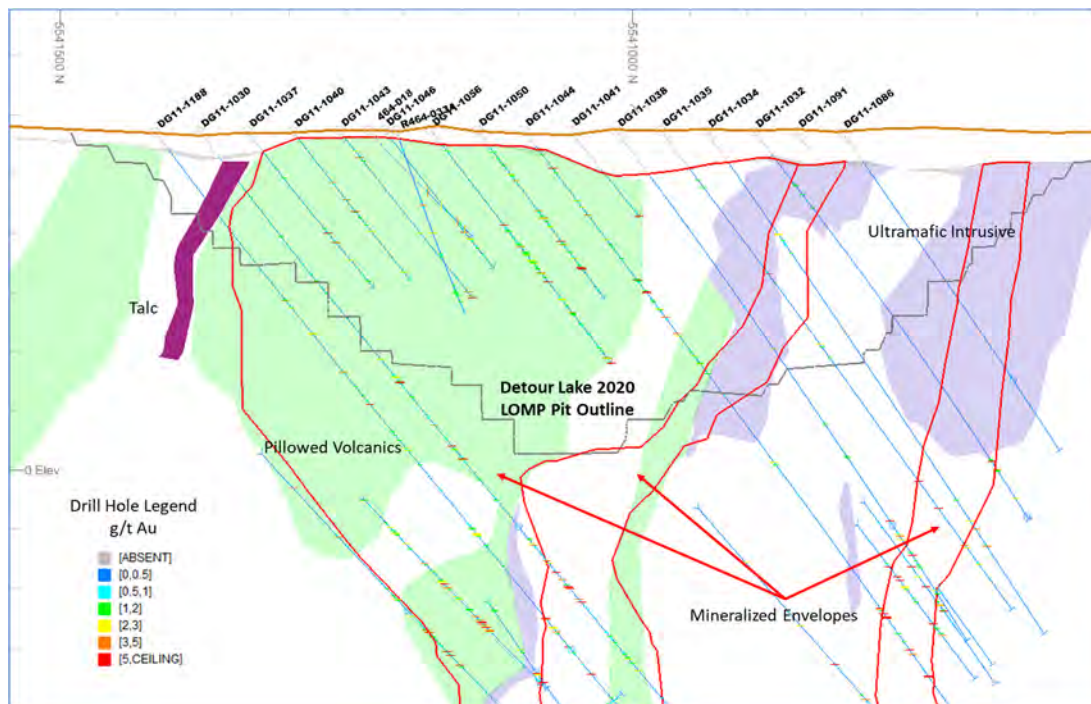


Figure 7-4: Deposit Geology Plan



Note: Figure prepared by Kirkland Lake Gold, 2020. In this figure, green = pillowed volcanic rocks; blue = ultramafic intrusive rocks; magenta = talc; khaki = volcaniclastic rocks and tan = granodiorite. Red shapes are the outlines of the mineralized envelopes.

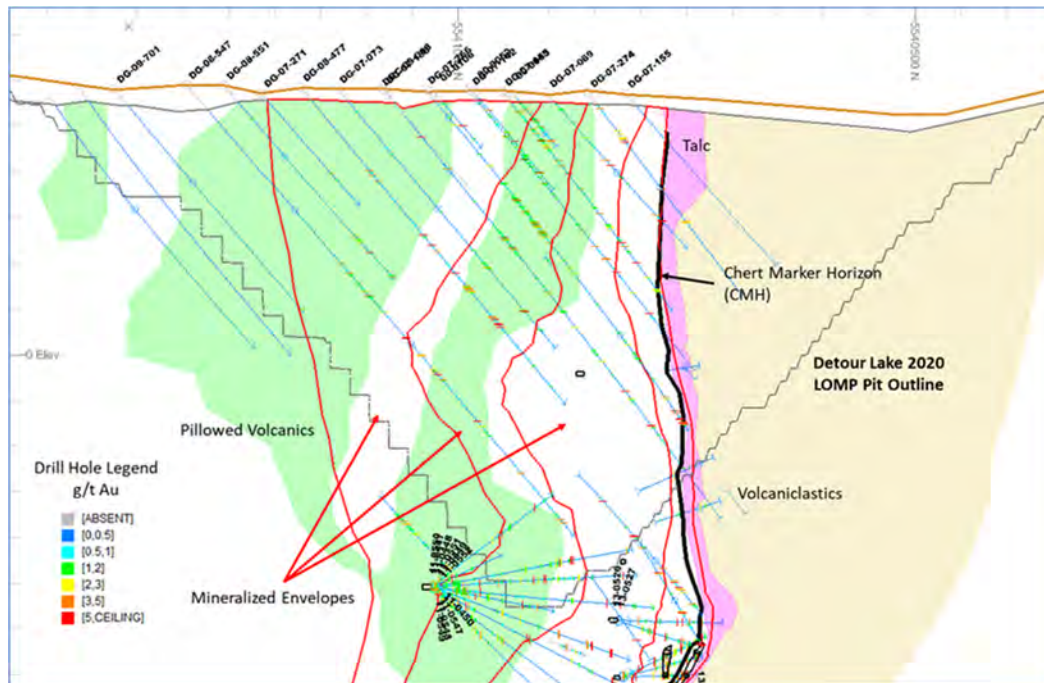
Figure 7-5: Geological Section, Detour Lake, 589690 E (looking east)



Note: Figure prepared by Kirkland Lake Gold, 2020. In this figure, green = pillowed volcanic rocks; purple = ultramafic intrusive rocks; magenta = talc. Red shapes are the outlines of the mineralized envelopes. Blue lines are drill traces.

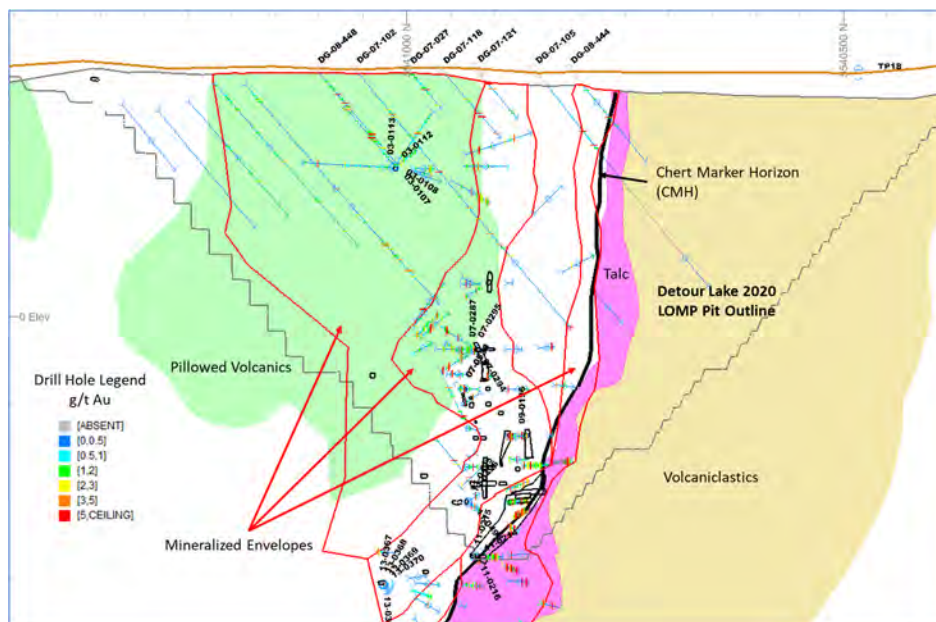


Figure 7-6: Geological Section, Detour Lake, 590,740 E (looking east)



Note: Figure prepared by Kirkland Lake Gold, 2020. In this figure, green = pillowed volcanic rocks; magenta = talc. Red shapes are the outlines of the mineralized envelopes. Drill traces in blue.

Figure 7-7: Geological Section, Detour Lake, 591,640 E (looking east)



Note: Figure prepared by Kirkland Lake Gold, 2020. In this figure, green = pillowed volcanic rocks; magenta = talc; thick black line = chert marker horizon; pale yellow = volcaniclastic rocks. Red shapes are the outlines of the mineralized envelopes. Drill traces in blue.

The mineralization hosted in the Main and Quartz Hangingwall Zones was tested by underground core drilling to a vertical depth of 900 m from surface and approximately 100 m below historical mine workings. The results from this drilling demonstrate that there may be potential to extend this mineralization at depth.

The footwall Talc Zone is principally located between sections 19,700E and 20,540E (eastern end of the Detour Lake Mine). It is hosted in highly altered (i.e., serpentinized and talcose) ultramafic flows with mineralization concentrated at both the upper contact (chert marker horizon), and lower contact of the Sunday Lake Deformation Zone, next to barren volcanoclastics and mafic volcanic rocks. Locally, the mineralization is cut by felsic to intermediate intrusive dykes, ranging in width from 0.3–25 m. The footwall mineralization commonly contains boudins of quartz veins and felsic as well as intermediate dyke slivers. It is generally intensely sheared, especially in the area adjacent to the contact with the volcanoclastic sediments.

Mineralization

Gold is associated with quartz–carbonate–pyrite–pyrrhotite \pm tourmaline veins and/or disseminated to very local semi-massive sulphides in hydrothermally-altered wall rocks.

There are two main mineralized zones, defined as hanging wall mineralization and footwall mineralization. Figure 7-8 is a plan view example showing the distribution of the two mineralized zones. Figure 7-9 is a section view example.

Hanging Wall

The hanging wall gold mineralization occurs in several different rock units within broad sub-vertical mineralized envelopes and splits into several sub-vertical domains sub-parallel to the orientation of the Sunday Lake Deformation Zone.

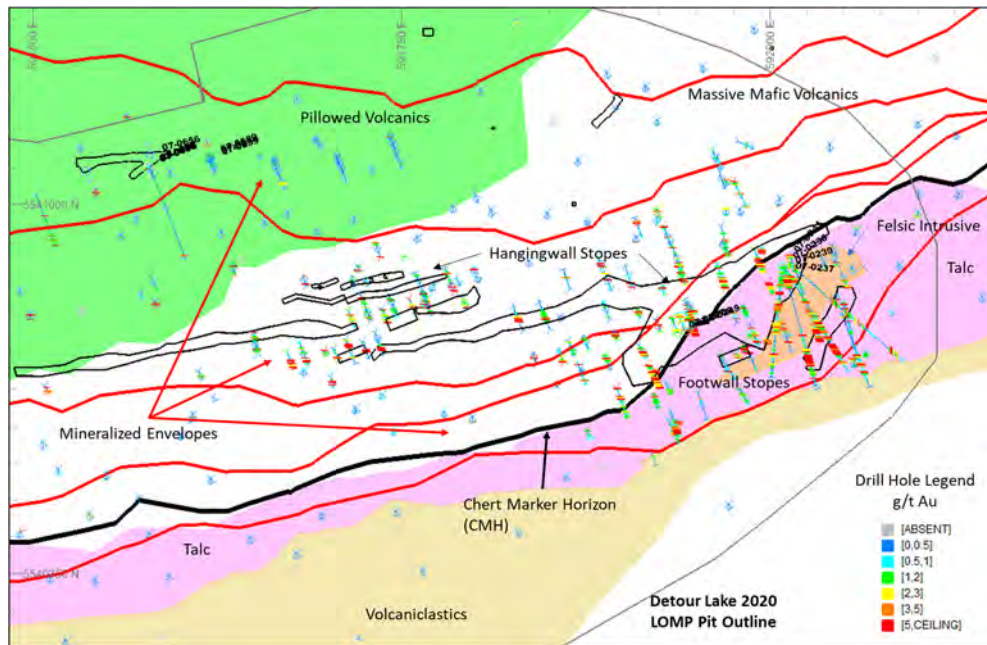
The Main Zone was the largest gold-bearing mineralized zone exploited in the period 1983–1987 and consists of gold mineralization occurring in the chert marker horizon or in quartz and quartz–carbonate vein systems splaying from the Sunday Lake Deformation Zone.

In the Campbell pit area, <1 m thick quartz veins, with a frequency of greater than one vein per metre, were part of a series of sub-vertically dipping east–west-trending highly-strained zones. Gold generally occurred as free gold with these veins.

West of section 19,620E, mineralization is commonly associated with increased biotite alteration, shearing, narrow quartz veining and minor pyrite or pyrrhotite. Local zones of strong brecciation with sulphide infilling have also been recognized along with minor chalcopyrite, telluride minerals and visible gold. Gold mineralization is associated with a series of sub-vertical to arcuate deformation zones characterized by enhanced strained fabrics, well defined open-space breccias, and to a lesser degree sheeted shear-hosted veins and extensional veins.

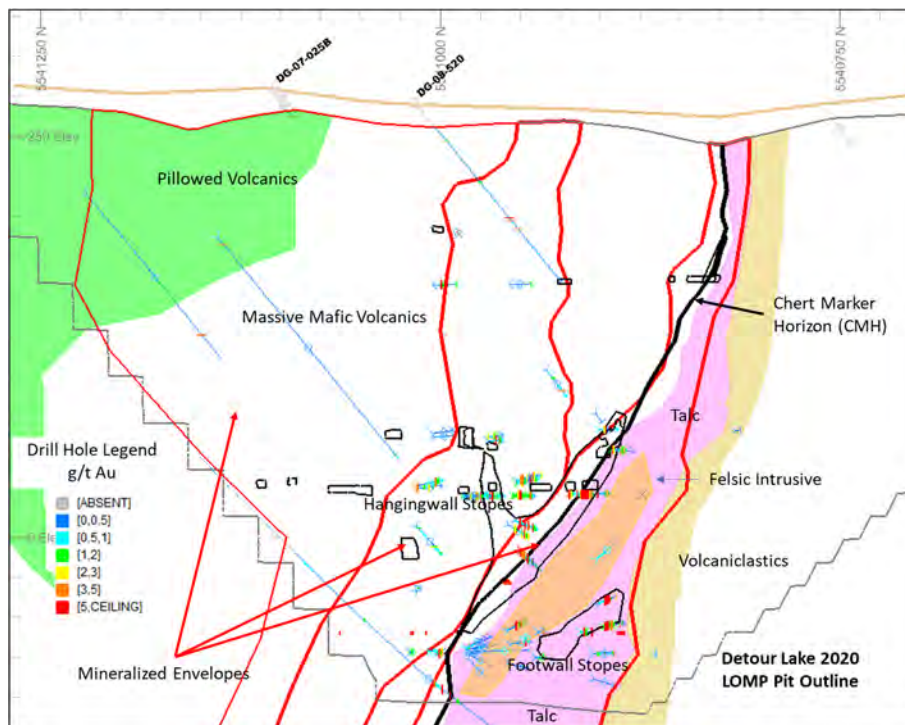


Figure 7-8: Plan of Footwall and Hanging Wall Mineralization (60 m elevation)



Note: Figure prepared by Kirkland Lake Gold, 2020.

Figure 7-9: Footwall and Hangingwall Mineralization Section 592040E (looking east)



Note: Figure prepared by Kirkland Lake Gold, 2020.

The QK Zone further to the west is open down plunge and has not been tested below 800 m. This mineralization is associated with narrow parallel to sub-parallel quartz veins, quartz boudins and sulphide rich veins/breccias with adjacent silicification and potassic alteration envelopes.

Footwall Mineralization

The Talc Zone varies in width from 4–15 m and tends to be less continuous along strike. Gold in the Talc Zone is dominantly associated with pyrite, pyrrhotite, and minor chalcopyrite along foliation planes, narrow discrete shears or strain zones, and in irregular lenses. The zones also contain short deformed lenses or boudinaged quartz veins. In some cases, it appears that the mineralization is controlled by strong fault structures containing several centimetres of gouge material.

7.3.2 West Detour and North Pit Areas

Dimensions

The West Detour mineralization extends from mine grid sections 14,500E to 17,600E and 19,100N to 21,300N and between elevation 5,300 and 6,300 m. This corresponds to a strike extent of 3.1 km, a width of 2.2 km, and an approximate elevation range of 1 km.

Lithologies

Generally, the gold zones occur in a variety of structural settings and several rock types including massive to pillowed tholeiitic basalt flows, variably deformed-altered basaltic to peridotitic komatiite units, cherty tuffs, gabbro and deformed felsic to intermediate dykes. Larger gold zones are subparallel to concordant with stratigraphy (contact related) and smaller quartz and potassic veins occur along splays.

Most of the West Detour mineralization is closely associated with talc/chlorite greenstone schist within an auriferous structural corridor referred to as the M Zone. The QK Zone extends from 16,160E to 17,160E between 600–750 m below surface.

Approximately 200 m north of the M Zone, the North Walter Lake Zone is developed in a zone of high strain with deformed quartz veins within pillowed to massive mafic volcanic flows. The North Walter Lake Zone gold mineralization is very similar to that found in the Detour Lake Mine hanging wall sequence. It is hosted by a komatiitic tholeiite mafic volcanic unit and flanked by Fe-tholeiitic mafic rocks in the hanging wall and Mg-tholeiitic mafic rocks in the footwall.

Mineralization

The M Zone lies approximately 400–500 m north of the chert marker horizon and is a westerly-trending gold system that is spatially associated with the margins of the chlorite schist unit. The chlorite schist stratigraphic horizon and associated gold mineralization was traced by drilling for approximately 5 km. The footwall and hanging wall sequence of the

chlorite schist in the M Zone is variably biotite altered with fairly abundant fractures and well-defined foliation (local veining) with associated pyrite, pyrrhotite, and rarely chalcopyrite. The mineralized zones appear lensoidal and plunge 20° west. Mineralized lenses vary from 5–50 m in true width.

Mineralization hosted in the QK zone is associated with narrow veins that are parallel to sub-parallel to stratigraphy, quartz boudins, and sulphide-rich veins/breccias within silicified and potassic alteration envelopes up to 25 m in true width.

Gold mineralization in the North Walter Lake Zone is within a relatively weak quartz vein stockwork with a low pyrite and pyrrhotite sulphide content. Mineralization is associated with moderate to strong shearing, potassic alteration of the mafic volcanic units, narrow quartz veining and minor pyrite and pyrrhotite.

An example cross-section showing the geology and mineralized zones at West Detour is included as Figure 7-10.

7.3.3 Zone 58N

Dimensions

The Zone 58N mineralized system has been intersected over an east–west strike length of 450 m, from surface to a depth of 800 m, and the mineralized system remains open at depth. The mineralization extends from approximately 595,300E to 595,750E and 5,533,700N to 5,533,800N (UTM coordinates). The width of the mineralization is variable, ranging from 4 m to >100 m at the centre of the deposit. Infill drilling has demonstrated that the geology and mineralization dip subvertically at 75° to the south.

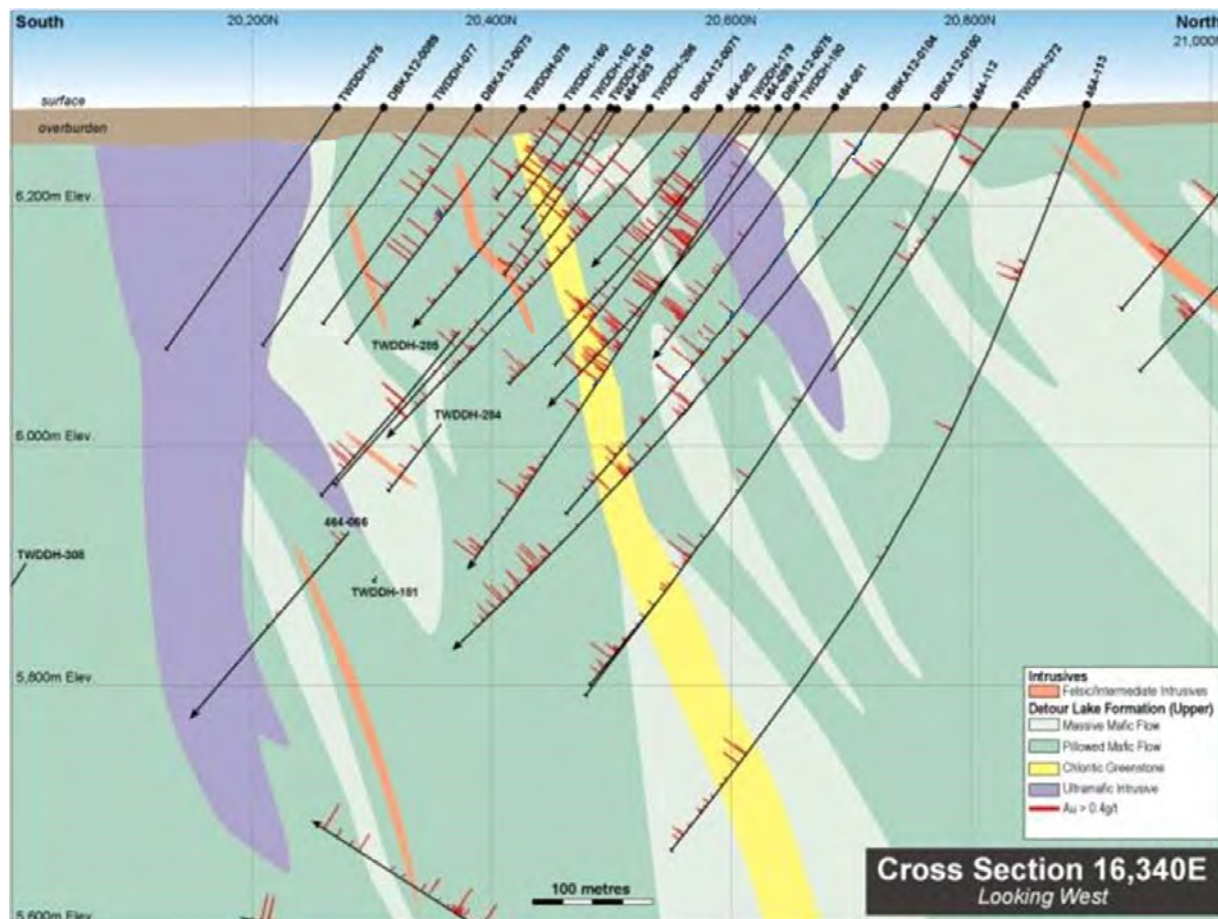
Lithologies

Gold mineralization in Zone 58N is within the southern portion of a feldspar porphyry intrusion, and characterized by intense brittle deformation and stockworks of quartz ± carbonate ± tourmaline veins with strong biotite–sericite–silica alteration. The thickness of the feldspar porphyry host rock can be >100 m and on average, mineralized lenses are 30 m wide. The feldspar porphyry intrusion narrows to the east and west near surface. Gold mineralization within Zone 58N is hosted by a swarm of plagioclase-phyric tonalitic dykes that intrude mafic rocks of the Deloro assemblage.

The geometry of host dykes is controlled by a large (~1,000 m in diameter) cylindrically-shaped intermediate equigranular intrusion, resulting in emplacement at a slightly oblique angle to the strike of regional stratigraphy. The dyke rocks, and associated mineralization, reach a maximum width of 150 m near the southwestern portion of the intermediate intrusion, and taper along strike.



Figure 7-10: Geological Section, West Detour, 16,340 E (looking west)



Note: Figure prepared by Detour Gold, 2018.

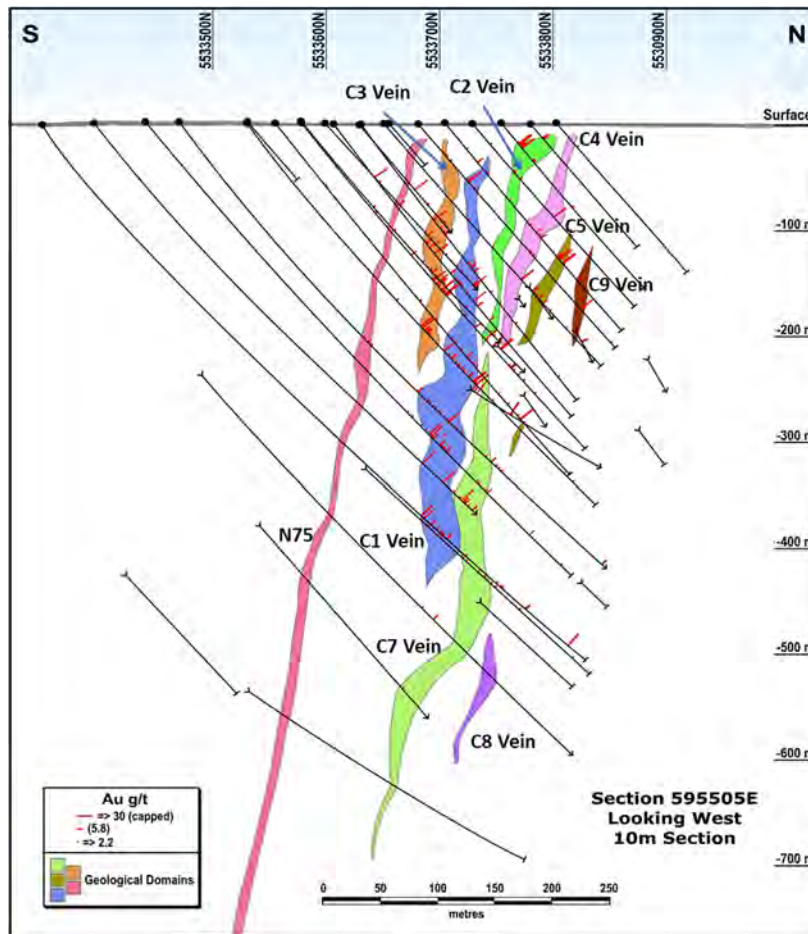
Mineralization

Visible gold is often present and occurs within coarse pyrite or as free gold within quartz. Sulphide mineralization associated with gold ranges from 0.5–5% pyrite with minor chalcopyrite, bismuth-tellurides, molybdenite and scheelite. Gold is found within and at the margins of quartz \pm tourmaline \pm carbonate stockwork-type veins that infill areas of brittle deformation. Visible gold occurs in nearly every drill hole that intersects mineralization and is also present as micro-inclusions within pyrite grains, or intergrown with bismuth-tellurides.

A simplified cross-section showing the mineralized zones is provided as Figure 7-11.



Figure 7-11: Cross Section, Zone 58N, Zone 75, 595505 E (looking west)



Note: Figure prepared by Detour Gold, 2018.

7.3.4 Zone 75

The surface expression of Zone 75 is located 20–50 m south of Zone 58N.

Dimensions

The Zone 75 mineralized system has been intersected over an east–west strike length of approximately 650 m, from surface to a depth of 600 m, and the mineralized system remains open at depth. The mineralization extends from approximately 595,200E to 595,775E and 5,533,700N to 5,533,775N (UTM coordinates). Mineralized intervals in the 75 Zone are 1–5 m wide and up to 9 m locally.

Lithologies

Zone 75 mineralization is localized to the stratigraphic contact of high-Mg and high-Fe tholeiitic mafic units. It is hosted by mylonitized and highly silicified rocks that have been subjected to chlorite, biotite and sericite alteration, which occasionally results in a banded chert-like appearance. Zone 75 dips at approximately 70° south.

Mineralization

When in close spatial proximity to Zone 58N, the mineralization within Zone 75 is much stronger and gold grades typically increase significantly. At depth when the lateral distance between Zone 58N and Zone 75 increases to >50 m, mineralization dramatically decreases in terms of both sulphide and gold content.

The sulphide content of Zone 75 is much higher than Zone 58N, reaching up to 20% pyrite with lesser associated pyrrhotite, chalcopyrite, and sphalerite. Visible gold is rarely identified. Mineralized intervals are typically 1–5 m wide, and can reach as much as 9 m wide when in contact with feldspar porphyry dyke rocks.

The simplified cross-section provided as Figure 7-11 includes Zone 75.

8.0 Deposit Types

8.1 Deposit Model

The Detour Lake and West Detour deposits are considered to be examples of orogenic greenstone-hosted hydrothermal lode gold deposits.

Greenstone-hosted hydrothermal lode gold deposits are typical of the Abitibi Greenstone Belt, and in particular the gold deposits found along the Destor–Porcupine Fault Zone from Timmins, Ontario through to Destor, Québec. These deposit types are found in greenstone belts around the world and are responsible for a large proportion of past world gold production, including most of the Canadian gold production.

The majority of Archean orogenic greenstone-hosted lode gold deposits occur within volcano–plutonic domains, which are typically distributed along crustal-scale fault zones occurring along or in close proximity to terrane or sub-province boundaries (Card et al, 1989). Elongate belts of metavolcanic and some metasedimentary rocks containing subsidiary amounts of ultramafic to felsic intrusive rocks typically dominate these domains. The intrusive rocks will have typically been emplaced in multiple pulses throughout the geologic evolution of the area. Metamorphism within the belts is generally greenschist to lower amphibolite facies. The structure of the gold districts is characterized by the presence of multiple generations of structural fabrics indicating the presence of several periods of deformation.

The deposit model for the 58, 58N, and 75 Zones is not firmly established. These mineralized lenses share characteristics with both syenite-associated oxidized intrusion-related deposits of the Kirkland Lake area (Robert, 2001) and the Sigma-Lamaque deposits of the southern Abitibi (Robert, 1986), the latter of which are thought to be associated with hydrothermal lode gold deposits.

Syenite-associated intrusion-related gold deposits are distally related to major fault zones, and in association with preserved slivers of Temiskaming-like conglomerate rocks. The deposits consist of stockworks of gold-rich veins and zoned alteration and can be found within or at the margins of composite intrusive stocks, satellite dykes and sills, and along secondary faults and lithological contacts away from the intrusions. Ore bodies in these different locations are interpreted to represent proximal to distal components of large magmatic-hydrothermal systems centered on, and possibly genetically sourced from, composite intrusive stocks. These intrusions, and associated mineralization, are contemporaneous with the deposition of Temiskaming-like rocks and usually post-date major D1 regional deformation.

8.2 Comment on Deposit Types

The QP is of the opinion that exploration programs that use a greenstone-hosted hydrothermal lode gold deposit or a syenite-associated intrusion-related gold deposit model are applicable to the Project area.

9.0 Exploration

9.1 Grids and Surveys

Kirkland Lake Gold's exploration drill targeting was planned and communicated using the local mine grid terminology in 2020–2021; however, both collar survey locational data and down hole survey data were recorded in the Universal Transverse Mercator (UTM), 1983 North American Datum (NAD83) system.

9.2 Geological Mapping

Detour Gold conducted reconnaissance field mapping programs between Hopper Lake and the Lower Detour area, and in the Lower Detour area along 200 m-spaced cut lines with maps produced at 1:5,000 scale. The mapping programs were used to field-check areas of geophysical anomalism and sites of historical drilling.

Detailed mapping at 1:50 scale was conducted on selected outcrops and trenches along with channel sampling.

9.3 Geochemical Surveys

9.3.1 Soil

Over 10,000 mobile metal ion samples were collected by Detour Gold in the period 2010–2011, at 50 x 400 m line spacing. Samples were taken from 10–25 cm depth. The sampling identified a gold-mineralized corridor of about 30 km extent along the Lower Detour Deformation Zone. Data were used in exploration targeting in conjunction with ground geophysical data.

A trial amplified geochemical imaging soil gas survey was conducted by Detour Gold in 2017 with a total of 33 samples collected. Of those samples, eight were collected near the western extent of the Detour Lake Project area over barren intrusive rocks, and the remaining samples were collected in the West Detour area over known mineralization. Results indicated a positive correlation to known mineralization in the West Detour area with Factor 4, an assemblage focused on elevated values for several sulphide compounds, and C3–C4 compounds identified. In the area over barren intrusive rocks no elevated response was identified. Assay results from the soil gas survey indicated that only nine of the 56 elements in the multi-element suite were above detection limit and had suitable quality control measures. However, those nine elements generally had very low values and were not considered to be reliable vectors to mineralization.

9.3.2 Channel

Channel and chip sampling, consisting of 45 samples, were completed in conjunction with outcrop mapping in the summer of 2012 and 2013. Results returned six samples above the

detection limit of 0.05 ppb Au. Of those six samples, three were collected from a medium grained tonalite–granodiorite outcrop near the TMA east of the Detour Lake Mine. Channel samples were collected as part of the regional mapping program that was focused on the Lower Detour area and specially the 58N prospect. One 40 m long hand-cleared area exposed a narrow east–west-trending silicified shear zone (up to 4 m wide) with minor quartz breccia stockwork and minor pyrite and pyrrhotite. The clearing was approximately 50 m south of the surface projection of a mineralized sheared zone intersected by drilling.

9.3.3 Trench

In 2014 and 2016, 13 trenches were excavated in the outcrop within the planned TMA area, mapped, and sampled. A total of 151 channel samples were submitted for assay. The trenches identified gold mineralization associated with the Sunday Lake tonalite–granodiorite intrusion. Mapping and sampling in the area identified shear zones up to several metres in width that locally exploit northeast-trending mafic–intrusive contacts.

9.4 Geophysical Surveys

9.4.1 Airborne

CGG Canada Services Ltd. completed a 13,816 line-km helicopter-borne MIDAS high resolution magnetic survey in 2015 over the entire Project area on behalf of Detour Gold. The survey was flown on 50 m line spacing at an elevation of approximately 30 m. The survey produced high quality total magnetic intensity and gradient data for additional processing. Final products received included line and grid data in the form of a Geosoft database (*.gdb) and XYZ file and Geosoft grids (*.grd), horizontal gradient enhanced total magnetic field, calculated vertical magnetic gradient, measured transverse magnetic gradient, total magnetic field, and digital elevation model. Third-party consultants Geoscience North produced various 3D inversions of the data along with further processing including tilt derivative and analytical signal. These products were used by Detour Gold and Kirkland Lake Gold to map the subsurface geology, and to generate a Project- and local-scale structural interpretation to help define drill targets.

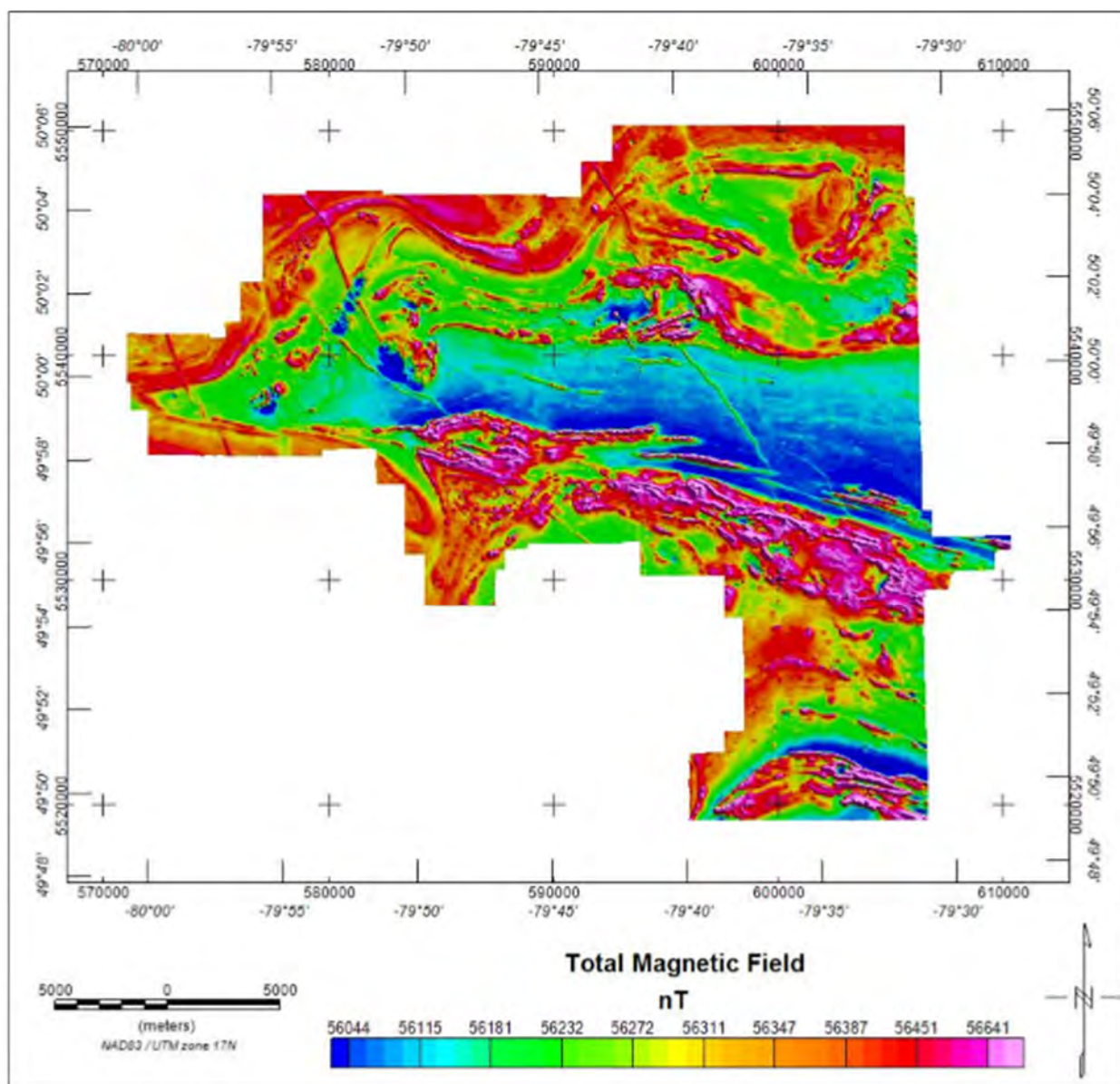
A map showing the airborne geophysical response in the Project area is provided as Figure 9-1.

9.4.2 Ground

Completed geophysical surveys are summarized in Table 9-1 and the outlines of the various surveys are shown in Figure 9-2. Historical IP data were conducted with different arrays including dipole–dipole, gradient and pole dipole.



Figure 9-1: Airborne Geophysical Map



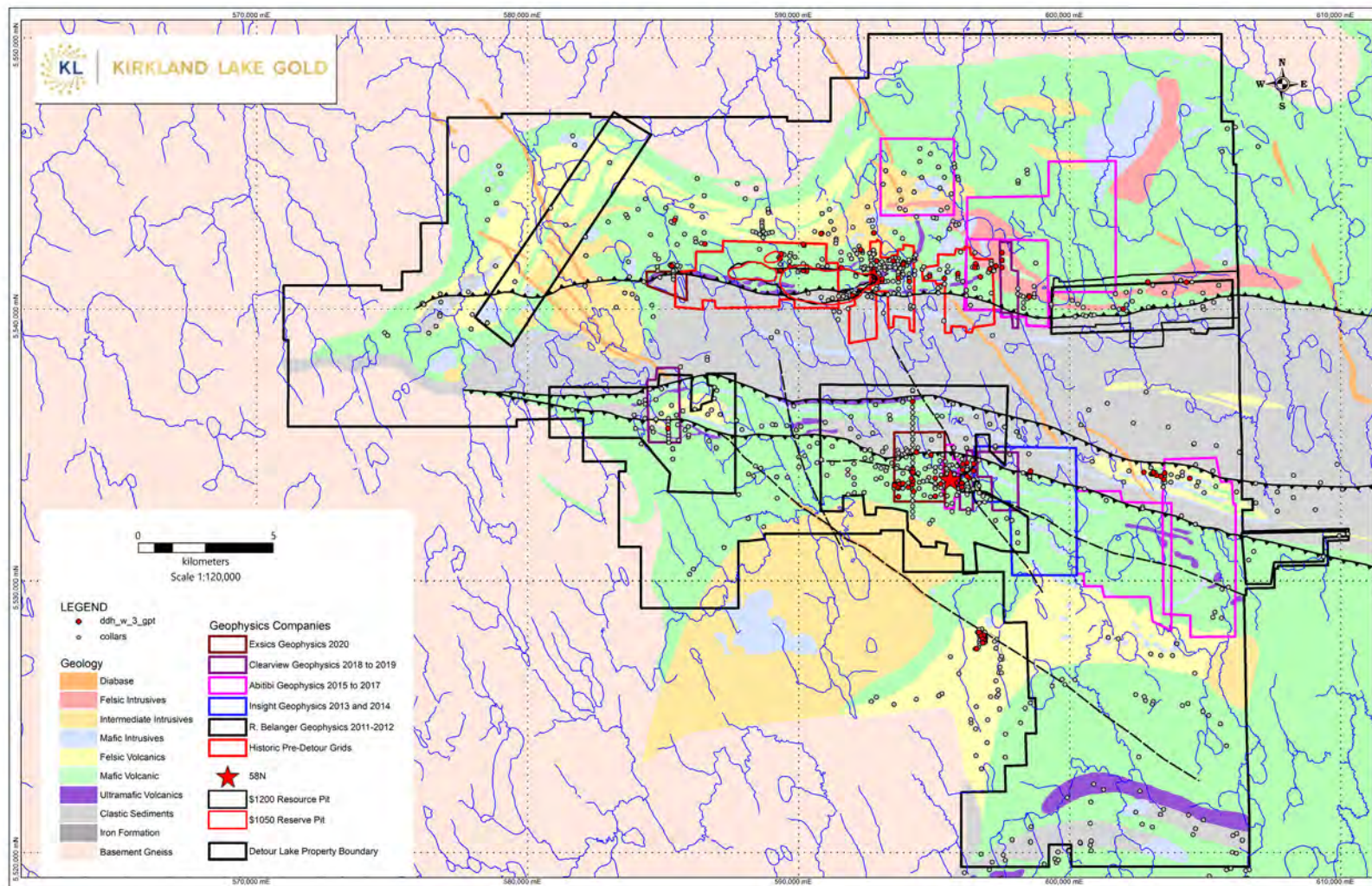
Note: Figure provided by Kirkland Lake Gold, 2020.

Table 9-1: Ground Geophysical Surveys

Year	Company/Contractor	Survey	Comment
2011–2012	Detour Gold	383 line-km phase domain dipole-dipole IP; lines 200 m apart,	Outlined a number of geophysical anomalies tested by regional drilling programs with the 58, 75 zones identified in these campaigns.
2013	Detour Gold	67 line-km of time domain IP geophysical surveys; 51 line-km of gradient array and 5 line-km of sectional IP conducted in the Lower Detour area; 16 line-km of gradient array and 3 line-km of sectional IP completed in the Sunday Lake area	Outlined several anomalies with follow up completed by core drilling programs in 2013 to 2015. Lower Detour Lake grid remains untested.
2014	Insight Geophysics	5.35 line-km of IP and sectional IP	Designed to test overburden cover in North Walter Lake area. Not successful in delineating anomalies as it was run in an east–west orientation.
2015	Abitibi Geophysics	10 line-km of OreVision IP on Zone 58N of the Lower Detour area on lines spaced at 100 m; 60 line-km to the east of Lower Detour Lake on lines spaced at 200 m	58N grid correlated well to known mineralized zones and identified some anomalies proximal to 58N. Testing was not successful in identifying new mineralization. Numerous anomalies identified in Lower Detour East that remain untested.
2016	Abitibi Geophysics	147 line-kilometres of OreVision IP spaced at 100–200 m on the eastern end of the Lower Detour trend and in the area of the tailings facility. Borehole time domain IP at 75 and 58N Zones	Produced near-surface and deep targets in the TMA area that were tested in 2016 and 2017. Lower Detour grid identified several anomalies that remain untested.
2017	Abitibi Geophysics	110 line-km of OreVision IP spaced at 200 m at the northeastern end of the TMA	Identified anomalies were tested in 2017.



Figure 9-2: Ground Geophysical Survey Location Map



Note: Figure prepared by Kirkland Lake Gold, 2020.

9.5 Petrology, Mineralogy, and Research Studies

In 2016, samples were collected from Zone 58N area to determine the age of the various lithologies and timing of the gold mineralization. Uranium–lead analysis (ID-TIMS method) of magmatic zircons from the tonalitic host rock indicated an age of 2694.5 ± 1.5 Ma. Uranium–lead analysis (LA-ICP-MS method) of hydrothermal titanites associated with Zone 58N mineralization indicates an age of 2680 ± 12 Ma. These geochronology results indicate that Zone 58N mineralization occurred slightly later than at the Detour Lake deposit, which occurred at 2697 Ma (Oliver et al. 2012). Based on those results, it is likely that multiple metallogenic events occurred on these two major deformation zones, which is encouraging for the exploration potential of the area.

In 2017, work done by the Geological Survey of Canada, as part of the ongoing TGI 5 project, was published in a preliminary progress report:

- Castonguay, S., Dube, B., Mercier-Langevin, P., and Wodicka, N., 2018: Nature and Significance of Deformation Zones on Gold Mineralization in the Detour Lake Area: Implications for Exploration in Ontario and Québec.

Geochemical and geochronological sampling was completed by the progress report authors, but no results of this work had been published at the Report effective date.

9.6 Exploration Potential

Exploration potential remains in the area where Mineral Resources are estimated. The Main and Quartz Hangingwall Zones in the Detour Lake deposit remain open at depth. The West Detour mineralization has potential be extended both to the west and at depth. The North Pit also has potential for depth and along strike extension, as does the 58N Zone and Zone 75.

Regionally, geophysical surveys and exploration drill holes have identified a number of gold-bearing structural trends that warrant additional exploration evaluation.

10.0 Drilling

10.1 Introduction

Table 10-1 summarizes all drilling in the Project area to July 26, 2021 that is included in the Project database. The database does not have a complete record of all the historical drilling. Core drilling completed on the Project (including 58N) within the database totals 8,384 drill holes (1,884,240.3 m) including 17 wedge holes. Figure 10-1 shows the collar locations.

Drilling and assaying that supports the Mineral Resource estimate for the Detour Lake deposit was completed by Placer Dome, Tradewinds, Pelangio, and Detour Gold from 1974–2016 (Table 10-2). Within the immediate area of the Mineral Resource estimate, there are a total of 6,519 core drill holes (1,128,965.7). Drill collar locations for those drill holes are shown in Figure 10-1.

Drilling and assaying that supports the Mineral Resource estimate for the West Detour deposit was completed from 1996–2021 by Placer Dome, Tradewinds, Pelangio, Detour Gold and Kirkland Lake Gold (Table 10-2). Within the immediate area of the Mineral Resource estimate, there are a total of 1,049 core drill holes (381,403.7 m). Drill collar locations for those drill holes are shown in Figure 10-1.

Drilling and assaying that supports the Mineral Resource estimate for the North Pit deposit was completed from 2004–2016 by Tradewinds, Pelangio Metals, and Detour Gold. Placer Dome completed one drill hole in the area drilled in the 1990s (Table 10-2). Within the immediate area of the Mineral Resource estimate, there are a total of 101 core drill holes (21,945.6 m). Drill collar locations for those drill holes are shown in Figure 10-1.

Drilling and assaying that supports the Mineral Resource estimate for the Zone 58N deposit was completed by Detour Gold from 2012–2017 (Table 10-2). Within the immediate area of the Mineral Resource estimate, there are a total of 370 core drill holes (138,433 m). Drill collar locations for those drill holes are shown in Figure 10-2.

10.2 Drill Methods

Where known, drill contractors have included Forage Marcel Lafrenière Inc, Landdrill International Inc, and Major Group International Inc (formerly Bradley Brothers).

Core drilling from surface included the following core size diameters: AQ (27 mm), BQ (36.4 mm) and NQ (47.6 mm).

Core drilling from underground included the following core size diameters: EX (21 mm), AQ (27 mm), BQ (36.4 mm), BQTK (45 mm) and NQ (47.6 mm).



Table 10-1: Drill Summary Table

Year	Operator	Number of Drill Holes	Metres
1974–1979	Amoco	314 (underground and surface)	51,935
1979–1987	Campbell	401 (underground and surface)	30,350
1983	Global Energy	7	989.9
1987–1999	Placer Dome	4,528 (underground and surface)	557,023
2003–2012	Trade Winds	466	199,973
2004–2006	Pelangio Mines	127	29,769
2007–2019	Detour Gold	2,268	820,161
2020–2021	Kirkland Lake	273	194,039.4
Totals		8,384	1,884,240.3

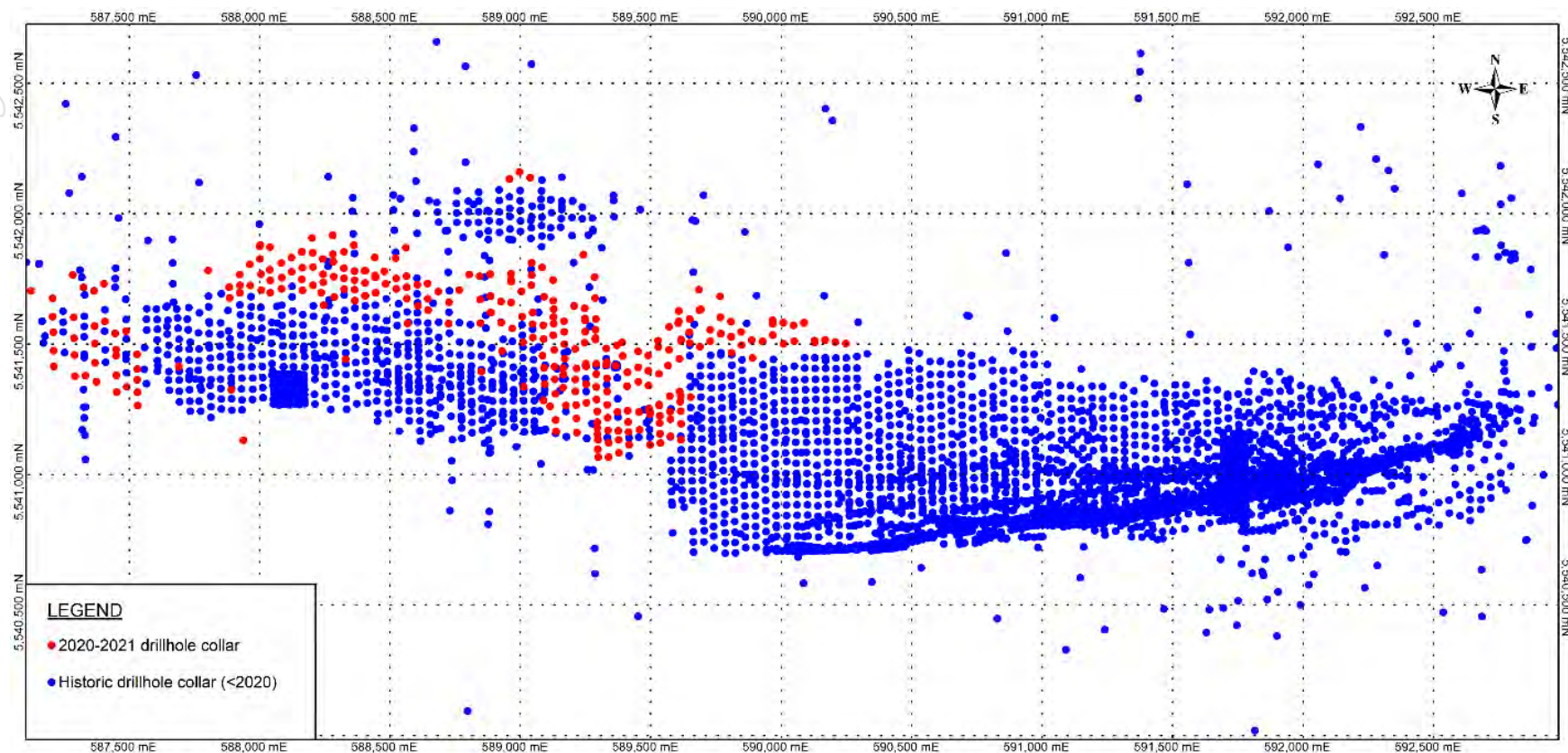
Table 10-2: Drilling Supporting Mineral Resource Estimates

Deposit	Number of Core Drill Holes	Metres
Detour Lake	6,519	1,128,965.7
West Detour	1049	381,403.7
North Pit	101	21,945.6
Zone 58N/Zone 75	370	138,433.0
Totals	8,039	1,670,748.0

Note: Drill hole numbers exclude overlapping areas considered during the resource modeling process; therefore metres may vary from totals reported in internal Mineral Resource modelling reports.



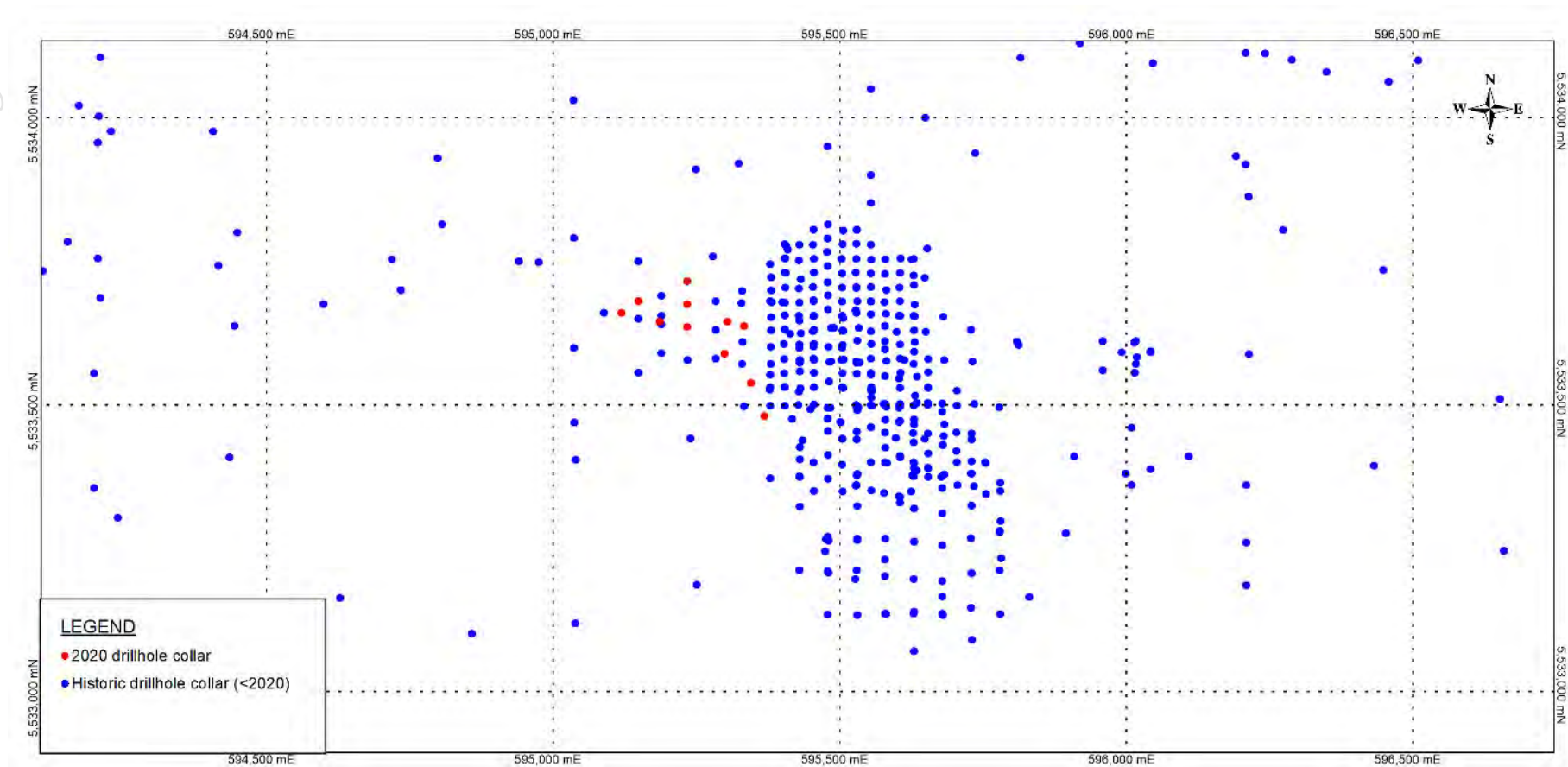
Figure 10-1: Drill Collar Location Plan, North Pit, West Detour, and Detour Lake



Note: Figure prepared by Kirkland Lake Gold, 2021. Drill hole collar locations shown in red completed by Kirkland Lake Gold, drill hole collar locations shown in blue completed prior to Kirkland Lake Gold's Project interest.



Figure 10-2: Drill Collar Location Plan, Zone 58N and Zone 75



Note: Figure prepared by Kirkland Lake Gold, 2021. Drill hole collar locations shown in red completed by Kirkland Lake Gold, drill hole collar locations shown in blue completed prior to Kirkland Lake Gold's Project interest.

10.3 Logging Procedures

10.3.1 Legacy

Legacy drilling from 1974–1999 includes drilling information collected from Detour Lake, West Detour and the North Pit areas of the Project. This information is used in support of the current Mineral Resource estimates.

Both underground and surface core drilled by Amoco and Placer Dome between 1974–1999 was handled and logged at a facility located at the Detour Lake Mine site.

Standard procedures for logging were not well documented and varied considerably between programs. Logging prior to 1980 was conducted by employees or contractors working for Amoco, Campbell or Placer. Logging after 1987 was conducted mainly by personnel working for the Detour Lake Mine geology department or Placer's exploration department.

The earlier logs by Amoco and Campbell appear to have been compiled as handwritten logs, which were sometimes re-typed with a mechanical typewriter and the later ones with various computer logging programs. The majority of logs were conducted with a logging program implemented in the early 1980s by the Detour Lake Mine geology department. Most of the logs compiled by Placer's exploration department were compiled using an in-house program referred to as Geology, and logs from the Pelangio drill programs were initially recorded as hard-copy logs or in Excel spreadsheets. All of the data were eventually compiled to a Gemcom database.

Historic coding of lithology, structure and mineralization appear to have varied with time. Logging by Amoco and Campbell was done using a generic system similar to that found on government maps. Most of the later logging by Placer Dome was done with a revised system, which contained rock names, and codes, which were standardized and were specific to the deposit.

10.3.2 Pelangio

Pelangio drilling tested the Detour Lake and North Pit areas.

Core was logged at a facility located at the Detour Lake Mine site between 2004–2005. All intervals designated for sampling were assigned and tagged by a geologist that took rock type and geology into consideration.

Most routine sampling was on 1 m widths, but narrowed locally to accommodate geological and mineralized zone boundaries. The minimum width was 0.50 m.

10.3.3 Trade Winds

Drilling completed by Trade Winds was focused on the West Detour and North Pit areas.

Core was marked at 1 m intervals, and driller measurement block corrections undertaken. Logging used the same pre-set terminology and codes as the Placer Dome programs. Geotechnical logging including core recovery, rock quality designation (RQD) and magnetic susceptibility readings (hand held unit) were collected and recorded in Excel spreadsheets. Core was photographed dry.

All of the above procedures were monitored and performed on site under direct geological supervision of a qualified geologist.

Core recovery averaged 98.9%.

10.3.4 Detour Gold

A geological legend was progressively developed for the Project area incorporating advances in understanding of the regional and local geology, and the deposit-scale geology, structure, alteration and mineralization.

Logging of RC chips was completed at the drill rig. The basic geological log included: primary lithology; alteration; mineralization; degree of oxidation; sample quality; depth of water inflow (estimation of rates); sample moisture content; veining; texture; fabric; presence of key minerals; sulphide grain size (from grain size chart). Areas of slow or hard drilling were marked onto the drill logs for geotechnical purposes. Acquire software was used to record observations made on percussion chips into touch screen and laptop computers.

Drill core was placed into wooden core trays at the drill, with depths of each run marked on wooden blocks and inserted into the trays by the drill crew. These trays were delivered to the Exploration Department facility on site. Core was fitted together in the box and rolled to foliation or to the bottom line to designate the axis along which to cut the core. In each campaign, a single side of the core was consistently sampled. The portion to be saved was fitted back into the core box to be kept as a permanent record. All logging and marking of samples was done by Detour Gold's geologists. Photographing, recovery, fractures, and rock strengths measurements were carried out by geotechnicians under geological supervision.

Lithology was logged on a variable interval basis with intervals determined from combinations of rock type, alteration, structure, and mineralisation. Geological logging was performed using and collected using a Microsoft Access database developed for Detour Gold. The data were transferred into various database systems depending on desired end usage of the data.

Lithology was logged based on the geological unit, with subdivisions created based on alteration and mineralization.

10.3.5 Kirkland Lake Gold

Drilling completed by Kirkland Lake Gold during 2020–2021 was primarily focused on the West Detour area.

All drill core handling was done on site with the logging and sampling processes conducted by employees and contractors of Kirkland Lake Gold. Information was collected using a DHLogger database (June 2020 drilling onward). Drill core was placed into wooden trays at the drill with depths of each run marked on wooden blocks and inserted into trays by the drill crew. These trays were delivered to the exploration core logging facility on site by the drill crew.

All geotech, geological and sampling data were collected and (in the case of samples) marked by Kirkland Lake Gold geologists. All data entry was done on individual local databases capable of synchronizing with a Central DHLogger/Fusion database managed by Kirkland Lake Gold database geologists. These local databases are synchronized daily.

The starting and ending depth, and corresponding box number for each box was entered into the core index sheet and used to print box tags. The RQD was recorded, as were the core recovery and core competency percentages, and the natural fracture frequency. Drill hole tab and collar information was added by the geologist including hole type, hole size, drill location, casing, coordinates, planned azimuth, planned dip, contractor, type of drilling, casing status, wedges, extension, survey instrument, cemented/plugged, abandoned hole, flagged hole and drilling start date.

Geological logging, including overburden, lithologies, alteration, mineralization, structure, deformation, and veining, was systematically recorded in DHLogger and uploaded into the Fusion database. Lithologies were logged as major and minor units. A minor unit was classified as between 0.1–1 m in core width and had no relation or potential for gold mineralization. Any visible gold identified by the logger was flagged and the interval was noted in the hole flags section. Veining was recorded as individual veins and as veining percentages. Alteration, sulphide, and deformation were a continuous log within the major lithology. Structures were logged as points and intervals, and logging described the type of fabric, the angle to the core axis, and the intensity.

10.4 Recovery

In general, core recovery exceeds 90% with losses generally occurring within overburden, the first few metres of bedrock, or when going through a fault zone.

10.5 Collar Surveys

10.5.1 Legacy

Legacy drilling completed by Amoco, Campbell Red Lake and Placer Dome was used for grade estimation in 2020 for Detour Lake, in 2013 for West Detour and in 2016 for the North Pit area.

The following information on the legacy collar surveys is abstracted from Kallio (2006).

Most of the drill holes on surface were originally spotted using measurements from cut grids.

Holes drilled by Amoco were located using an east–west-trending grid that used imperial measurements, which was installed in the mid-1970s. Drill holes completed by Campbell, Placer Dome, and Pelangio were located using a true north grid, which was established around 1981.

The hole locations for the 2005 Pelangio drill program were determined by measurements from a short baseline that was installed to the west of the former open pit by Sutcliffe Rody Quesnel of Timmins, Ontario, and the drill holes for the 2006 program were located by surveying in with a differential global positioning system (DGPS).

The initial elevations for most legacy drill hole collars were assumed to be derived from a combination of topographic maps and data points from previous drill holes or nearby survey stations. The azimuths were probably determined by measurements from pickets or a compass. Azimuths for the Pelangio drilling were determined by turning off angles from the new baseline using an optical square prism.

The reliability of collar locations for most historic surface drill holes is unknown as many were drilled from areas within, or immediately surrounding, the former pit on lands, which have now been reclaimed. Most of the available information was obtained from drill log headers. The only original survey data that have been located were for some selected holes of the 38, 38W and the 464 series. Holes from the 38 and 38 W series were surveyed by H. Sutcliffe and holes from the 464 series by General Exploration Services of Timmins, Ontario.

The initial position and azimuth of most underground holes was typically determined using measurements from underground survey stations and reference points. The measurements were usually done by a geologist or diamond drill foreman, but were sometimes surveyed in by the mine surveyors in situations requiring greater accuracy. Initial collar elevations are assumed to have been determined using engineering plans and starting dips set with a degree rule. Holes not surveyed during the initial setup were often picked up by the mine survey department after completion of the drill hole.

Data from surveying of underground holes was located on a combination of drill log headers, a survey ledger book and survey sheets prepared by the Detour Lake Mine survey department. Data for several holes was also recorded in computer files generated with the MINSURV program, a multi-purpose software application instituted by the mine survey department in the early 1990s to store and manipulate survey data. Kallio (2006) reviewed the survey sheets and indicated that they contained information from holes drilled by Placer Dome between surface and the 15 level and that approximately 50% of holes were represented.

10.5.2 Trade Winds/Detour Gold

Detour Gold survey protocols included that foresights and backsights were laid out by Talbot Surveys Ltd. (Talbot) using a differential global positioning system (DGPS) Topcon GR3 instrument with a Nikon total station instrument. The Universal Transverse Mercator (UTM),

1983 North American Datum (NAD83) system was used to record position data. Survey data were converted to the mine grid for compatibility with the historical data.

Occasionally, when Talbot staff were unavailable, hand-held global positioning system (GPS) units or compass and chain methods were used to locate collar pickets, which were inadvertently moved or destroyed. For exploration and reconnaissance drilling programs, drill hole collars were surveyed using GPS units.

Trade Winds used the Detour Gold protocols from 2009 onward. Once the drill rig was positioned on the planned location, it was lined up using a Reflex GPS casing alignment instrument working within ± 0.2 – 0.5° accuracy. After a drill hole was completed and the rig moved off drill site, the casing was covered with a steel cap and a wooden marker was placed next to the casing with the hole collar identification. Talbot returned to site approximately every second week and surveyed the casing locations, as well as the azimuth and inclination of the holes drilled during this period. Measurements were done at the top of the casing (usually sticking out 15 cm above ground).

The 2016 infill drilling of the North pit and Detour West pit used compass and chain methods to locate collar pickets. Final hole locations for the North pit were surveyed by Labelle Surveys, Timmins, Ontario. The two drill holes completed in 2017 were not surveyed.

10.5.3 Kirkland Lake Gold

Kirkland Lake Gold used a Reflex TN14 Gyrocompass for spotting and aligning drill holes during the 2020 drill program. Drill hole collar surveys were systematically surveyed by Talbot Surveys Ltd. using a differential global positioning system (DGPS) Topcon GR3 instrument with a Nikon total station instrument.

Some select collars were also surveyed by Kirkland Lake Gold staff using a DGPS Trimble SPS986 premium precise rover.

10.6 Downhole Surveys

10.6.1 Legacy

Down-hole survey procedures varied with time and are not well documented. The following is abstracted from Kallio (2006).

Most of the early programs by Amoco and Campbell appear to have been surveyed with acid tests and with some limited Tropari testing. Spacing of the tests varies between 30–60 m, but occasionally surveys may be as much as 120 m apart.

Downhole surveying during later drilling by the Detour Lake Mine geology department was often completed using a combination of Tropari and acid tests, which were taken by the diamond drillers. Spacing between consecutive tests varied from 30–60 m, but locally could be as much as 200 m between measurements. Most drill holes <60 m, such as those from the 56Lv to 66 Lv series were typically only surveyed with a single acid test at the bottom of the hole.

Downhole surveying conducted by Placer's exploration department was often conducted using a combination of Sperry Sun and acid testing. Spacing between acid or Sperry Sun tests typically varied between 50–75 m. Spacing between consecutive Tropari tests was as much as 200 m.

Downhole surveying by Pelangio was completed using a Flexit SmartTool supplied by Fordia of Val d'Or, Quebec. Drillers, who had been trained by the supplier, took all tests. Testing in 2005 was at 30 m intervals and testing in 2006 at 3 m intervals down the length of the hole. All tests were checked for magnetic interference.

Available data from past downhole surveying were in the form of drill log headers or survey ledgers prepared by past project operators.

10.6.2 Trade Winds/Detour Gold

Downhole surveying of Tradewinds drill holes was also done by a Flexit SmartTool whereby azimuth and dip reading were collected every 3 m down hole by the drillers. Tradewinds removed irregular readings that were caused by magnetic interference.

For the Detour Gold programs, Reflex EZ-Shot (EZ-Shot) and Reflex Maxibor II (Maxibor) instrumentation were used. The primary survey was completed at 30–60 m intervals using an EZ-Shot instrument. Immediately after the drill hole was completed, surveys of the direction and dip changes were carried out using a Reflex Maxibor II instrument. The instrument was lowered down the hole and readings taken every 3 m on the way back up. In 2010, Detour Gold discontinued the use of the Maxibor check surveys because the results were comparable with those obtained using the EZ-Shot.

10.6.3 Kirkland Lake Gold

Kirkland Lake Gold used a Reflex EZ Trac and Reflex Gyro Sprint-IQ instrument for down hole surveys during its 2020 exploration program. The primary survey was completed at 10 m below casing followed by surveys completed at 50 m intervals. A final continuous survey was completed at the end of each hole.

10.7 Sample Length/True Thickness

For surface drilling programs testing the Detour Lake deposit, the true width is estimated to be 65–75% of the drilled length, except for exploration holes drilled to the north (i.e., 19,480E to 20,440E) where the true width is estimated at 60–65% of the drilled length. Actual true width is dependent of the inclination and direction of the hole when intercepting the mineralized zone.

For surface drilling programs testing the West Detour deposit, the true width is estimated to be 65–75% of the drilled length. Actual true width is dependent of the inclination and direction of the hole when intercepting the mineralized zone.

For historic underground drilling programs at the Detour Lake and West Detour deposits, drilling was done in “fans” and true thickness of mineralization is variable from approximately 60–85% of drilled thickness.

10.8 Grade Control

Grade control at the Detour Lake Mine is done through RC drilling, conducted at 10 m spacing (north–south) on 20 m sections. Holes are drilled at an azimuth of 180° (due south), at -60° inclination. Lengths of holes are designed to intercept either two or three full benches, thus are typically 28 m or 42 m long, unless adjusted for unusual bench heights. The occasional area can be drilled to 56 m depth to accommodate drill access near old underground workings or other circumstances.

All holes locations are surveyed. Any RC hole over 3 benches has a gyroscopic survey performed for hole deviation.

Kirkland Lake Gold RC grade control holes completed in 2020–2021 are not used to support Mineral Resource estimation.

A grade control testing program consisting of 47 drill holes on a 20-m section spacing was carried out on the West Detour deposit in 2016 to test the grade estimation model and define the impact of tighter spaced drilling on the modelled ore zones. This drilling is also not used in estimation.

10.9 Twin Hole Drilling

In 2016, an infill drilling program of 5,353 m in 44 holes (excluding one hole abandoned due to excessive deviation) was carried out on a 20 x 20 m spacing to simulate grade control and evaluate the resource block model current at the time. The grade control drilling targeted a geologically complex ore domain area of the West Detour pit in order to validate modeling assumptions and determine if an alternate modeling methodology would be preferable. Composites simulating ore zones were created from each drill hole. Results were compared with the grade interpolation models that intersected the drill hole traces, and were considered to validate the resource estimate current at the time.

This program also twinned nine holes from Trade Winds and one hole from the 2012 Detour Gold drilling program. The drilling covered an area of 120 m (Sections 15,780E to 15,900E) by 150 m (20,375N to 20,525N), from bedrock surface to a depth of approximately 100 m (6,270EL to 6,170EL).

The results from the twinned-hole test indicated that over the entire mineralized intervals the correlation was positive, although results varied considerably over individual intervals (both length of mineralized zones and gold grade) as expected due to the high nugget effect. There did not appear to be a grade bias in the area tested.

10.10 Drilling Since Database Close-out Date

Drilling completed after the July 26, 2021 database close out to September 30, 2021 included 56 core drill holes and six wedge holes totalling 52,594.5 m:

- Five core holes and two wedge holes were drilled below the Detour Mine totalling 4,234.5 m;
- A total of 51 core holes and four wedge holes were drilled at West Detour for 48,360 m of drilling.

The additional drill holes drilled proximal to the Detour Mine are drilled below the Mineral Reserve pit and have confirmed the continuity of the mineralization. In the QP's opinion, the new drilling has no material impact on the Measured or Indicated Mineral Resources in this area.

The West Detour drill holes targeted both outside and within current the area where Inferred Mineral Resources were estimated. In the QP's opinion, the new drilling in the West Detour area has the potential to support estimation of additional Inferred Mineral Resources as well as to potentially support upgrade of a portion of the current Inferred Mineral Resource estimate to higher confidence categories.

10.11 Comments on Drilling

In the opinion of the QP, the quantity and quality of the logged geological data, collar, and downhole survey data collected in the exploration and infill drill programs are sufficient to support Mineral Resource and Mineral Reserve estimation and mine planning as follows:

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

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

11.0 Sample Preparation, Analyses, and Security

11.1 Drill Sampling Methods

11.1.1 Legacy

Information on the sampling conducted during legacy drill programs is abstracted from Kallio (2006).

Employees and contractors working for Amoco at core logging facilities located at the Detour Lake site conducted sampling between 1974 and 1979. General procedures were similar for both underground and surface drill core and involved sampling of most of the drill hole. Core samples were typically collected on standard 5-ft (1.52 m) intervals with some being narrowed to as little as 1-ft (0.3 m), when better grades were expected. In most cases the collection of samples was done by splitting and extracting $\frac{1}{2}$ of the core with a mechanical splitter. Most samples with visible gold were whole-core sampled and indicated by a notation of “w/c” in the log. Samples were packed in bags containing numbered tags and transported to the laboratory by air.

Employees and contractors working for Campbell at core logging facilities located at the Detour Lake site conducted sampling between 1979 and 1983. Sampling was conducted on new core from both surface and underground drilling completed by Campbell, as well as on selected intervals of older core from Amoco drilling. The procedures used were defined by Campbell, and Kallio (2006) thought that they were similar for both underground and surface drill core. Most sampling of core from new drilling was conducted from the top to the bottom of the drill hole on standard 5-ft (1.52 m) intervals, but with some occasional sampling on narrower intervals. Samples were split, extracting $\frac{1}{2}$ core with a mechanical splitter, but with some local whole core sampling. No information was available to explain where the different methods were used. Sampling of older core from Amoco drill programs was intermittently conducted. Results of the re-sampling indicate that program was focused on filling in gaps in sampling from previous work. The procedure for this re-sampling is unknown. Samples were shipped to the laboratory by road or air.

Sampling between 1987 and 1999 was conducted by employees and contractors working for the Detour Lake Mine geology department or Placer's exploration department, depending on which group was co-ordinating the work. Most sampling by the Detour Lake Mine geology department was carried out from top to bottom of the hole based on 1 m sample intervals, and whole core methods, with the exception of selected intervals of BQ or BQTK-size core, which were sometimes sawed in half to preserve a portion for future reference. Extra waste samples of 0.5 m in length were collected on either side of potentially gold-bearing structures to allow calculation of grade over a minimum 3 m width. The sampling by Placer's exploration department was targeted towards selected intervals of a drill hole that were considered to have the best potential for hosting significant mineralization. Sample widths varied from 0.3–1.0 m in length and were delimited by geological boundaries. Collection of the samples was accomplished by sawing the core

with a core saw and extracting ½ of the core. Observation of the cross piled core remaining from these holes indicates that the sawing was done along a consistent centerline and resulted in two equal core halves.

Employees working for Pelangio or High River Gold at a core logging facility located at the Detour Lake Mine site completed the 2004–2005 sampling. Most routine sampling was on 1 m widths, but narrowed locally to accommodate geological and mineralized zone boundaries. The minimum width for most intervals sampled was 0.50 m. Collection of the samples was conducted by a technician by extracting ½ of the core in the boxes as marked by a geologist. Most samples in 2004 were collected by splitting with a hydraulic splitter, and most from samples in 2005, and specifically those drilled west of the open pit, were cut with a core saw.

Sampling during the 2006 Pelangio drill program was completed by employees and contractors working for Pelangio at a core logging facility located at the Detour Lake Mine site. Routine sampling was conducted at 1 m widths, but narrowed locally to as low as 0.50 m to accommodate geological and mineralized zone boundaries. Samples were collected by a technician by sawing of the NQ sized core into two equal halves and placing one half of the core into a plastic sample bag.

11.1.2 Trade Winds

Trade Winds sampled continuously within the mineralized zones at approximately 1 m intervals. All core collected from Trade Winds' drilling program was sampled on site under the supervision of a Trade Winds QP geologist. The core was split using a conventional splitter or cut using a diamond saw, placed into plastic sample bags with the tag, and placed in plastic containers for shipping in batches of 20 direct to ALS Chemex Laboratories (ALS Chemex) in Val d'Or, Québec. All samples were stored in Trade Winds' core shed until they were shipped and half the core was left in the core boxes as a permanent record and stored on site at the core farm located in the airstrip stage-in area.

Following the 2010 drill program, Trade Winds completed four acid "near-total" digestion standard multi-element ICP package (ME-ICP61) assays on select core intervals. A total of 53,664 samples were first analysed using a Pearson correlation table with the intent of screening elements that required in-depth studies. Results showed a moderate correlation with silver and bismuth and to a lesser degree with sulphur and cadmium. Gold assays >10 g/t Au showed a stronger bismuth and cadmium correlation.

The elements of interest, namely bismuth, chromium, magnesium, manganese, iron, zinc, and silver, were examined spatially in 3D to assess their usability for assisting the geological interpretation. Individually, the single elements did not indicate that they would help the model much.

A weak to moderate correlation with gold and the degree of potassic alteration was observed for the Detour West area.



11.1.3 Detour Gold

Detour Gold personnel sampled on nominal 1 m sample intervals. Where gold was visible in the drill core, the sample was broken down into 0.5 m samples for gravimetric or screen metallic analyses. Samples were marked both on core and corresponding sample tags and bags. In each drill campaign, a single side of the core was consistently sampled. The portion to be saved was fitted back into the core box and kept as a permanent record. Samples were bagged and numbered by a technician and double-checked for accuracy.

11.1.4 Kirkland Lake Gold

Kirkland Lake Gold personnel sampled exploration core continuously from top to bottom of every hole. Samples were selected according to lithology and vein structure. Samples were primarily between 0.5–1.0 m with perceived non-auriferous core sampled up to 1.5 m. Sampling followed a cutline marked on the core by the logging geologist. A small percentage of the core was not sawn and was shipped as whole core samples.

All core was systematically sampled using the following procedures.

Core was fitted together in the box and a cutting line delineated at the bottom of the core. In each campaign, a single side of the core was consistently sampled. The portion to be saved was fitted back into the core box to be kept as a permanent record.

Samples were bagged immediately after cutting and a printed sample tag was attached to the sample bag as it was stapled shut.

Each rig was assigned a specific zip tie color for any samples associated with it. The senior core technician ensured that these color assignments were in a location in the core cutting facility that is easily accessible by the core technicians.

Rice bag tags (stating dispatch name and samples within rice bag) and zip ties are prepped in advanced and the information double checked by the core technician assigned to the drill hole, and a due diligence check was performed at random by the senior core technician.

Once all samples were cut and bagged, the geologist assigned to the drill prepared the sample dispatch.

Geo-technicians used sample reports generated by the database to verify correct standards and sequencing in samples; and samples were re-checked prior to shipping for accuracy before being released.

In general, for NQ core, five samples were placed in rice bags before being placed in sample bins or on shrink-wrapped pallets.

The senior core technician completed a visual inspection of the sample batches to be submitted. They signed off on the dispatch form to indicate that the submission was checked.

Samples were shipped to assay laboratories using either shrink-wrapped pallets or large secure bins. Shipments were moved to an accessible location for transport on designated shipment days at the exploration camp site.

The samples were shipped directly from site by Gold Heart Courier to certified off-site analytical laboratories for preparation and assaying. All sample shipments leaving site were tracked by the Kirkland Lake–Detour Lake site warehouse. Analytical laboratories sent sample receipt confirmation to company representatives and verified that all samples were received for the appropriate dispatch.

11.1.5 Grade Control

Samples were taken at 1 m intervals through the use of a rotary cone splitter to ensure proper sampling of the material. Samples of 4–6 kg were taken and bagged separately. Field duplicate samples were taken at a rate of one per hole for a 28 m hole and two per hole for 42 m holes. Commercial standards and blanks were included in the sample shipments.

Where placement of the RC drill was not possible, or on occasions where sampling for waste characterization only was required, blast holes were sampled at a spacing of 12 x 14 m (every second section). The technician used a shovel to cut a slot in the spoil pile at the location selected (channel sampling). The slot needed to be cut from the inner edge of the cone adjacent to the hole, to the outer edge of the cone, ensuring good representation of the full material. Each sample was between 4–6 kg.

11.2 Underground Sampling Methods

Information on the underground sampling is abstracted from Kallio (2006).

Chip and muck sampling in most areas was conducted using standard procedures established by the Detour Lake Mine geology department.

Routine chip sampling was conducted by subdividing the face into a continuous series of 1 m wide panels, with only minor variations in width for changes to rock type and economic indicators. The number of samples per face ranged from 3–6. Samples were collected by hammering off chips of rock from within each of the panels. The average sample size was usually about one kilogram, but could vary from 0.5–2 kg. After 1996, the procedure was changed slightly so that the width of panels were set with boundaries defined by major changes in rock type and economic indicators such as quartz, pyrite, chalcopyrite, sulphide breccia veins and potassic alteration. The typical sample size was 1.5–2 kg.

A modified chip sampling procedure was used by Placer Dome in the QK Zone. The width of the panels was governed by major changes in rock type and economic indicators, ranging from 0.30–1.0 m. Five samples were typically taken per face, typically 2–4 kg in weight.

Routine muck sampling was conducted in most new development and in active stopes of the Detour Lake Mine. The procedure for taking the samples up to at least the end of 1990 consisted of grabbing approximately 1.5 kg of broken rock material from scoop buckets

and/or broken muck piles which was mainly -2 inch (-51 mm) in diameter. This procedure may have been modified after 1990 to include larger and more frequent sampling, but there is no firm documentation to support if or to indicate when this might have occurred. After 1996, samples were collected from scoop buckets, with the number collected being based on the mining method being used. For development headings and mechanized cut and fill stopes, a minimum of four samples per blast were taken with each sample consisting of approximately 5 kg of mixed fines and -3inch (-76 mm) material. Under routine conditions, development headings had one sample collected for every five buckets, and longhole stopes had one sample taken for every 10 buckets, but this could be increased in situations where the grade declined to below the cut-off grade.

Collection of muck samples in the QK zone area was conducted by the scoop operators. The basic procedure in all headings involved taking one sample for every five buckets with a minimum of five samples in total from each heading regardless of blast size. Each sample was approximately 5 kg in size and consisted of material between ½–3 inches (13–76 mm) in size.

11.3 Bulk Sampling Methods

Information on the bulk sampling is abstracted from Kallio (2006).

Bulk sampling was conducted by Amoco in the late 1970s during the early project evaluation stages. These data are no longer available.

Placer Dome conducted bulk sampling in 1997 during the QK project. In total, 39 drift rounds comprising 6,718 t was extracted and transported to surface, where it was crushed and processed through a sampling tower. All of the drift rounds in the sample were mapped, channel sampled and muck sampled in detail during the extraction. Samples from the tower were then sent to Placer Dome's research laboratory in Vancouver for gravity concentrate-cyanide leach analysis.

11.4 Density Determinations

11.4.1 Detour Lake

Prior to late 2009, no systematic specific gravity (SG) measurements were taken during the Detour Gold drilling programs. The values used for the tonnage calculation relied mainly on historical data derived from prior production. During the life of the former Detour Lake Mine, the operator used a density of 2.9 t/m³. This number was used by Detour Gold as the average SG for all rock types.

From October 2009 to November 2010, Detour Gold staff completed SG measurements on 4,603 samples using an inert gas pycnometer. The measurement was conducted on the pulp fraction of every 40th sample. The average SG value obtained from this program was 2.98 t/m³.

In 2009, SGS Geostat conducted independent SG measurements on 211 samples from twin drilled hole DG-09-806 and on 312 samples from compositing 24 drill holes (total leaching test), all located within the eastern part of the Detour Lake deposit. Results from the total leaching test and twin drill hole samples gave an average SG of 2.9 t/m³.

In 2010 and 2011, SGS Geostat conducted additional SG measurements on 120 duplicate half-core samples using the water displacement methodology (weight in air divided by the volume displaced by the core sample in a graduated cylinder). The independent verification of the SG returned similar observations as the 2009 data verification program.

The massive, weakly-altered mafic volcanic units generally show higher SG values (2.9–3.0 t/m³) than the more altered pillowed mafic volcanic units (2.8–2.9 t/m³). The more felsic lithologies observed in the eastern area of the deposit, typically as intermediate intrusive units, returned SG values in the 2.7–2.8 t/m³ range. The range of SG values observed for the different lithologies generally reflects the variation in geochemical composition (including the intensity of alteration) and the natural porosity of the rock units. The average SG value calculated from both data set supported the assumed historical SG value of 2.9 t/m³, was used in all studies by Detour Gold.

In 2020 Kirkland Lake Gold reviewed available bulk density values. Detour Gold samples, when combined with those of former operator Pelangio, represent a total of 7,045 samples that were collected for density from recently-drilled boreholes for various lithologies. Most of these samples were 1 m in length. A density value was determined for each assigned lithology code by constructing histograms and removing outliers and determining the average for each lithology. Lithologies without a bulk density were assigned an average density of 2.99 t/m³.

11.4.2 West Detour

No independent review of the SG was done on the West Detour deposit by SGS Geostat. WGM (2011) mentioned three composite measurements varying from 2.95–3.02 t/m³, and a more exhaustive set of 632 data points ranging from 2.52–3.55 t/m³ with an average of 2.91 t/m³.

Starting in 2020 for the West Detour exploration program, core was measured for SG by Kirkland Lake Gold personnel using a Cruiser checkweighing SG station (CKT -8H) which uses a full core water immersion technique.

A total of 2,749 measurements were taken, seven were removed, and 2,742 were used with values ranging from 2.05–3.89 t/m³, averaging 2.95 t/m³ (Table 11-1). Note that a value of 2.9 t/m³ was used for estimation purposes in Section 14. The seven samples that were removed from the dataset were considered to be erroneous. The Kirkland Lake Gold exploration team selected core samples every 20 m starting at the top of the drill hole, selecting a 10 cm piece of core for measurement. If the lithology changed within the 20 m interval, both lithologies were sampled.

Table 11-1: 2020–2021 Core Specific Gravities

Lithology	Number of Measurements	Specific Gravity
Mafic flow	1058	2.97
Volcanic pillow flows	1048	2.96
Chloritic greenstone	85	2.85
Ultramafic intrusive	30	2.99
Gabbro	83	3.03
Ultramafic volcanic	14	3.00
Mafic intrusive	60	2.94
Intermediate intrusive	97	2.78
Felsic intrusive	56	2.73
Chert equivalent	28	2.67
Talc-chlorite	9	2.97
Metasediments	84	2.85
FW mafic volcanics	81	3.00
Volcanoclastic	4	2.82
FW mafic flows	2	2.88
Fault zone	3	2.86
	Total	Ave
	2,742	2.95

11.4.3 Zone 58N

Starting in 2014 for the regional exploration program, including Zone 58N, core was measured for SG by Detour Gold personnel using full core water immersion technique. A total of 2,644 measurements were made, and values ranged from 2.09–3.68 t/m³, averaging 2.8 t/m³.

11.5 Analytical and Test Laboratories

11.5.1 Primary Laboratories

Where known, the laboratories used during the legacy programs included Assayers Limited, in Rouyn, Quebec, (Assayers); the Dome Mine Laboratory in Timmins (Dome laboratory), Ontario; Swastika Laboratories Ltd, in Swastika, Ontario (Swastika); the Detour Lake Mine assay laboratory (Detour Lake laboratory); X-Ral Laboratories in Rouyn, Quebec (X-Ral); Bondar Clegg in Ottawa, Ontario (Bondar Clegg); Chemex Laboratories in Mississauga, Ontario (Chemex Mississauga); Chemex Laboratories in Rouyn, Quebec (Chemex Rouyn); Accurassay Laboratories in Thunder Bay, Ontario (Accurassay Thunder Bay); and

Activation Laboratories Ltd in Timmins, Ontario (Actlabs). Accreditations at the time the work was performed is not known. All laboratories other than the Dome laboratory and the Detour Lake laboratory were independent of the operators at the time. All laboratories were independent of Kirkland Lake Gold.

Detour Gold used SGS Minerals in Garson, Ontario (SGS Garson) and Don Mills, Ontario (SGS Don Mills), Ontario for sample preparation and SGS Don Mills for analysis during the 2007–2012 Detour Lake and 2012 West Detour drill campaigns. At the time the laboratories held ISO17025 accreditation for selected analytical techniques. The laboratories were independent of Detour Gold and are independent of Kirkland Lake Gold.

Samples from the 2008–2013 Detour Gold campaigns were sent to Accurassay in Timmins, Ontario (Accurassay Timmins) for sample preparation and to Accurassay Thunder Bay for analysis. The laboratories held ISO17025 accreditation for selected analytical techniques. The laboratories were independent of Detour Gold and are independent of Kirkland Lake Gold.

For the 2014–2015 regional exploration programs (including Zone 58N), Detour Gold sent all of its samples to ALS Minerals in Sudbury, Ontario (ALS Sudbury) for sample preparation. Analysis was completed by ALS Minerals in Vancouver, B.C. (ALS Vancouver). The laboratories held ISO17025 accreditation for selected analytical techniques. The laboratories were independent of Detour Gold and are independent of Kirkland Lake Gold.

During the Detour Gold campaigns of 2016–2017, sample preparation was performed at ALS Sudbury, and analysis at a number of ALS Minerals laboratories globally, including Vancouver; Val D'or in Québec (ALS Val D'or); Reno in Nevada; and on rare occasions in Lima in Peru and Loughrea in Ireland. The laboratories held ISO17025 accreditation for selected analytical techniques. The laboratories were independent of Detour Gold and are independent of Kirkland Lake Gold.

For the 2018–2019 regional exploration campaigns, Detour Gold sent samples to ALS Timmins for sample preparation, with analysis completed at ALS Vancouver. The laboratories held ISO17025 accreditation for selected analytical techniques. The laboratories were independent of Detour Gold and are independent of Kirkland Lake Gold.

In 2020–2021, Kirkland Lake Gold used ALS Minerals, with sample preparation completed at ALS Timmins and analysis at ALS Vancouver. Exploration samples were also submitted to Actlabs, SGS Laboratories in Cochrane (SGS Cochrane), and AGAT Laboratories in Mississauga (AGAT). These laboratories conducted both sample preparation and analysis. The laboratories hold ISO17025 accreditation for selected analytical techniques. The laboratories are independent of Kirkland Lake Gold.

11.5.2 Secondary/Check Laboratories

ALS Vancouver was used as a secondary laboratory for the 2012 drill campaigns.

ALS Vancouver and Actlabs were used as secondary laboratories for the 2020–2021 campaigns.

11.5.3 Grade Control

Grade control samples are analysed at SGS Cochrane and Actlabs. The laboratories currently hold ISO17025 accreditation for selected analytical techniques. The laboratories were independent of Detour Gold and are independent of Kirkland Lake Gold.

11.6 Sample Preparation and Analysis

11.6.1 Legacy

Information on the legacy sample preparation and analysis is abstracted from Kallio (2006).

The 1974–1979 samples were prepared by grinding split core to ¼ inch, selecting a half-assay-ton sub sample and fire assaying. Samples from later drill holes were prepared with a mixture of whole core and split core sampling methods whereby the core was ground to 100 mesh, split to one-assay-ton and fire assayed.

Although no records are available at the Dome laboratory, crushing and grinding of samples in the period 1979–1987 used a cone crusher and manual pulverizer and all analysis was completed using fire assay of a one-assay-ton sub-sample. The procedures used at Swastika in the same time frame are unknown.

From 1987 to 1991, procedures were the same for all core sizes and consisted of crushing to -½ inch using a Rhino crusher, followed by splitting of 150 g and pulverization to -150 mesh. Samples were weighed at 10 g and analyzed using an aqua regia digestion and ketone extraction method. Most of the intervals were only assayed once, but some containing higher-grade and visible gold were checked with a second assay of the pulp.

From 1995–1999, the same procedure was used for all core sizes and consisted of crushing to -10 mesh, followed by splitting of 300 g and pulverization to -200 mesh. Samples were weighed, and fused, followed by cupellation. Samples were digested in nitric acid and hydrochloric acid and analyzed using atomic absorption (AA) fitted with an autosampler. Most of intervals were assayed only once, with some intervals containing higher grades and visible gold being assayed twice.

The chip and muck samples collected from 1987–1999 underwent the same initial steps as for drill core samples, followed by weighing, digestion in 30 ml of aqua regia and filtration. This was followed by addition of 10 ml of ketone and analysis using AA.

The routine procedure for most core samples to the end of 1993, involved the crushing of samples weighing between 1–2 kg to approximately -10 mesh, followed by splitting out and pulverizing to -150 mesh a subsample weighing approximately 250–300 g, splitting and analysis of a 1 assay tonne subsample using fire assay and AA finish. This procedure seems to have been slightly modified in 1993 to include re-assaying of certain higher-grade samples with either the same processes as the initial sample or with a pulp and metallic

procedure. The detection limit for all gold assaying at Swastika was 0.001 g/t, at Assayers was 0.05 g/t and at X-Ral was 0.01 g/t.

The procedure at Chemex from 1993 involved crushing of samples to -10 mesh, followed by splitting and pulverization of a 150 g sub-sample using a ring and puck pulverizer and splitting and analysis of a 30 gram subsample. Initial assaying of samples at Chemex was often conducted with fire assay and an AA finish that had an upper limit of 12 g/t. Samples exceeding the upper limit were usually re-assayed using a fire assay and gravimetric finish. A large number of samples with visible gold and higher-grade values from the initial assaying were also usually re-analyzed with pulp and metallic methods. The detection limit for all assaying at Chemex was 0.03 g/t.

The 2004–2005 protocols at ALS Mississauga included dry crushing of samples to >70% passing -10 mesh (2 mm screen), riffle splitting and pulverization of 250 g subsamples to > 85% passing 75 µm screens and fire assaying of one-assay-ton subsamples. Samples with visible gold were analyzed with a pulp and metallics procedure.

Protocols at Accurassay Thunder Bay included crushing to 90 % -10 mesh and then splitting of a 30 g sub-sample and pulverizing to -150 mesh. Analysis was usually done with the fire assay technique except for intervals containing free gold or elevated values on the initial analysis, which were done using the pulp and metallics procedure. The pulp and metallics procedure in 2004 was based on a 1 kg split, but this was adjusted in 2005 to total pulverization.

For the 2006 program, samples were processed at Swastika using dry crushing to >90% passing -10 mesh, riffle splitting and pulverization of 350 g sub-samples. The analysis was conducted using fire assay of one-assay-ton sub-samples then using pulp and metallic screen procedures for samples with visible gold.

11.6.2 Trade Winds/Detour Gold

The sample preparation used at SGS Don Mills and SGS Garson consisted of crushing to 90% passing -10 mesh (2 mm), riffle splitting to obtain a 500 g subsample, pulverizing to 90% passing 200 mesh (75 µm) and sub-sampling to obtain a 50 g pulp for assaying.

For Block A, samples by Trade Winds were sent to ALS Val-d'Or and ALS Vancouver from 2003–2010. Sample preparation consists of crushing to 70% passing -10 mesh (2 mm), riffle splitting to obtain a 1 kg subsample, pulverizing to 85% passing 200 mesh (75 µm) and sub-sampling to obtain a 50 g pulp (Au-AA24) for assaying. For 2011, Trade Winds sent their samples to Actlabs where the preparation procedure was very similar to the one used by the ALS laboratories.

Starting in 2007, routine gold analysis for the Detour Lake deposit was done using fire assaying with atomic absorption spectroscopy (AAS) finish (SGS Code FAA515) then later an inductively-coupled plasma–atomic emission spectroscopy (ICP–AES) finish (SGS Code FAI505 and FAI525). Where the gold assays exceeded 10 g/t Au, the fire assay was repeated with a gravimetric finish (SGS Code FAG505). All samples with visible gold identified during the field logging procedure went directly to the metallic screen procedures

(SGS Code FAS30K and FAS31K) using a nominal 500 g split of the original -10 mesh sample (2 mm). All routine assayed samples (fire assay atomic absorption or fire assay-gravimetric) returning values ≥ 5 g/t Au on the first analysis were reanalyzed using the metallic screen procedure. For the metallic screen procedure, the sub-samples were screened at -150 mesh (106 μm), and then both the coarse and fine fractions (duplicate and often triplicate assays on the fine fraction) were completed using fire assaying with an inductively-coupled plasma–optical emission spectrometry (ICP–OES) finish. Selected samples were also analyzed for copper using sodium peroxide fusion and ICP–OES finish.

The sample preparation procedure at Accurassay Timmins, used from 2008–2013, consisted of crushing to 75% passing -8 mesh, riffle splitting to obtain a 500 g subsample, pulverizing to 85% passing 200 mesh, and sub-sampling to obtain a 50 g pulp.

During the 2014–2017 drill campaigns, the routine sample preparation at ALS Sudbury included drying and crushing the full sample to 70% 2 mm or better, splitting to obtain a 1 kg sub-sample, pulverizing to 85% passing 75 μm , and sub-sampling again to obtain a 50 g.

Different analytical protocols were used, depending on whether the assay sample was classified as deposit-related (Table 11-2) or exploration (Table 11-3).

11.6.3 Kirkland Lake Gold

In 2020–2021 Kirkland Lake Gold used ALS Minerals, Actlab, SGS and AGAT laboratories for analytical services. Sample preparation at each laboratory is similar, with samples being initially logged in the tracking system, weighed, dried, and finely crushed to better than 70% passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen. A split of up to 500 g is taken using a Boyd rotary splitter and pulverized to better than 85% passing a 75 μm (Tyler 200 mesh, US Std. No. 200) screen.

Sample assaying was completed using fire assay techniques with samples < 10 g/t Au being analyzed using AAS and samples > 10 g/t Au analyzed with a gravimetric finish. Samples containing visible gold along with the sample immediately preceding and immediately after the visible gold were analyzed using a screen metallics procedure (Table 11-4).

At SGS, a portion of the samples analyzed by fire assay were finished using ICP–OES on a 50.0 g sample and samples > 10 g/t Au analyzed with a gravimetric finish.

11.6.4 Grade Control

The routine sample preparation for RC and blast hole samples includes drying and crushing the full sample to 90% passing -10 mesh (2 mm) or better. A 500 g split is then pulverized to 85% passing 200 mesh (75 μm), then sub-sampled again to obtain a 50 g pulp for assaying.

Samples are assayed using assay with an ICP–OES finish. Sulphur and carbon analysis are done on 14 m composites (equivalent to one bench) using LECO.

Table 11-2: Detour Gold Analytical Methods, Deposits

January 2007 to July 2007		August 2007 to June 2008		July 2008 to November 2012		2016	
SGS Code	Description	SGS Code	Description	SGS Code	Description	ALS Code	Description
FAA515	50 g fire assay with AAS finish (5 ppb to 10 ppm)	FAI505	50 g fire assay with ICP-AES finish (1 to 10,000 ppb)	FAI525	50 g fire assay with ICP-AES finish (5 to 10,000 ppb)	Au-AA24	50 g fire assay with AAS finish (2.5 to 10,000 ppb)
FAG505	50 g fire assay with gravimetric finish for Au >10 ppm	FAG505	50 g fire assay with gravimetric finish (for Au >10 ppm)	FAG505	50 g fire assay with gravimetric finish (for Au >10 ppm)	Au-GRA22	50 g fire assay with gravimetric finish (for Au >10 ppm)
FAS30K	Gold by screen metallics: Fire Assay on 500 g screened at 75 µm (for Au >5 g/t or visible gold) – on second pulp from the reject	FAS31K	Gold by screen metallics: Fire assay on 500 g screened at 106 µm (for Au >5 g/t or visible gold) – on second pulp from the reject	FAS31K	Gold by screen metallics: Fire assay on 500 g screened at 106 µm (for Au >5 g/t) – a second pulp is prepared from the reject	Au-SCR24	Screen metallic on selected samples following gravimetric analysis

Table 11-3: Detour Gold Analytical Methods, Exploration

2008–2013	2014	2015–2017
Accurassay Timmins	ALS Vancouver	ALS Vancouver
Fire assay with atomic absorption spectroscopy finish on a 50.2 g sample	Fire assay with atomic absorption spectroscopy finish on a 50 g sample	Fire assay with atomic absorption spectroscopy finish on a 50 g sample
Fire assay repeated with a gravimetric finish when assays >3 g/t Au	Samples with visible gold or >3 g/t Au follow screen metallic analysis: Fire assay with gravimetric finish on 1,000 g split screened at 100 µm	Fire assay repeated with a gravimetric finish when assays >3 g/t Au or with visible gold. From March 2017 >5 g/t Au or with visible gold thereafter
Samples with visible gold follow metallic screen analysis: Fire assay on 1,000 g split screened at 106 µm. All fractions fully analyzed		Selected samples were re-assayed following screen metallic analysis: Fire assay with gravimetric finish on 1,000 g split screened at 100 µm

Table 11-4: 2020–2021 Kirkland Lake Gold Analytical Methods, Exploration

Actlabs	ALS Vancouver
Fire assay with atomic absorption spectroscopy finish on a 50.0 g sample	Fire assay with atomic absorption spectroscopy finish on a 50 g sample
Fire assay repeated with a gravimetric finish when assays >10 g/t Au	Fire assay repeated with a gravimetric finish when assays >10 g/t Au
Samples with visible gold follow metallic screen analysis (along with sample immediately before and after visible gold sample): Fire assay on 500 g split screened at 106 µm. All fractions fully analyzed.	Samples with visible gold follow metallic screen analysis (along with sample immediately before and after visible gold sample): Fire assay on 500 g split screened at 106 µm. All fractions fully analyzed.
SGS	AGAT Laboratories
Fire assay with atomic absorption spectroscopy finish on a 50.0 g sample.	Fire assay with atomic absorption spectroscopy finish on a 50 g sample
Fire assay with ICP-OES on a 50.0 g sample	Fire assay repeated with a gravimetric finish when assays >10 g/t Au
Fire assay repeated with a gravimetric finish when assays >10 g/t Au.	Samples with visible gold follow metallic screen analysis (along with sample immediately before and after visible gold sample): Fire assay on 500 g split screened at 106 µm. All fractions fully analyzed.
Samples with visible gold follow metallic screen analysis (along with sample immediately before and after visible gold sample): Fire assay on 500 g split screened at 106 µm. All fractions fully analyzed.	

11.7 Quality Assurance and Quality Control

11.7.1 Legacy

Information on the quality assurance and quality control (QA/QC) programs is abstracted from Kallio (2006).

QC for the 1974–1983 period was from the laboratories involved, and is predominantly no longer available.

Check sampling conducted by Amoco in 1976 included a comparison of assays from duplicate core halves, pulps and rejects which were initially assayed at Assayers and re-assayed at Swastika, and indicates a reasonably good correspondence between the two data sets.

A comparison of fire assays with complete leaching was conducted in 1978 by IREM-MERI using 245 duplicate halves of NQ core collected by Amoco. This program had one side of the drill core assayed using fire assay, and the second half assayed using complete leaching. The results of the comparisons indicated no overall bias, but a tendency for the original low-grade samples to be slightly underestimated and original high-grade samples to be slightly overestimated, with the point of reversal being at approximately 0.30 oz/ton.

During 1991–1992, Swastika re-assayed one pulp for approximately every 20 samples processed as well as most original assays when the gold value was >1 g/t. Placer's

exploration department undertook a blind re-assay program by having Chemex re-assay 250 Swastika rejects. During 1992, Assayers re-analyzed one pulp for every 20 samples processed, one reject for every 25 samples, and most original assays when the gold value was >1 g/t.

The 1993 program comprised routine checking of pulps by X-Ral, consisting of reanalyzing one pulp for approximately every 25 samples processed. Placer's exploration department had samples grading greater than 500 ppb Au re-assayed, required reanalysis of samples grading >5 g/t Au or with visible gold at a second laboratory using pulp and metallica, and requested Chemex re-assay selected samples.

Quality control procedures after 1993 included routine insertion of quality control standards, blanks and duplicates by Chemex laboratories as well as re-assaying of selected samples with visible gold and/or unusually high initial results with pulp and metallica. Kallio (2006) noted that one 'in-house' or Canmet standard plus a blank and a duplicate were inserted into the sample stream for every batch of 20 samples.

Procedures for 2005 included duplicates, blank core samples and standards inserted at the approximate rate of one in 20 samples processed at the site as well as routine quality control by ALS Chemex and Accurassay. All samples with visible gold or returning initial results >10 g/t Au were re-analyzed with pulp and metallica. Review of the blank and standard results indicated that most were within a reasonable tolerance of the original value. Many of the duplicate data had a wide spread, which resulted in the duplicates being reassayed using pulp and metallica.

Pelangio conducted a verification program on selected samples from 1982–1995 through re-assaying of original and new pulps. The reviews supported the earlier observation of a wide spread in assay results from duplicate data.

11.7.2 Detour Gold

During the period 2007–2011, Detour Gold had the following QA/QC sample insertion rates for the Detour Lake drill programs: coarse blanks, 1:40; standard reference material (standard), 1:40; drill core duplicate, 1:40; and preparation duplicate, 1:30. Certified reference material used during this timeframe consisted of nine different standards purchased from OREAS (Australia).

There was no evidence of systematic gold contamination based on the blanks that were inserted with the sample stream. In addition, there was no bias evident between original and duplicate halves of the drill core that could indicate that technicians were preferentially submitting the more mineralized half of the core for assay. Differences between core duplicate assays were expected based on the review of reproducibility for preparation duplicates.

QA/QC for the Block A area prior to 2012 included insertion of standards, blanks, and duplicates. Insertion rates are not known. Blanks were barren granite material, and standards were sourced from CDN Resource Laboratories Ltd. and Rocklabs Ltd.,

independent suppliers of standards to the mining industry. Review of the QA/QC program indicated no significant instances of bias or contamination.

Detour Gold followed the same QA/QC procedures in 2012 for the Block A area as for Detour Lake. QA/QC samples included blanks, standards and duplicates. There was no evidence of systematic gold contamination based on the blanks that were inserted with samples. The standard data indicated a change in the performance of SGS Don Mills during the year. All of the low-grade standards (0.3–1.6 g/t Au) showed a low bias in the order of -5% and very high failures rates; whereas the high-grade standard performed well. It was concluded that SGS Don Mills made changes to its fire assay procedures that resulted in a low bias post-May 2012 for gold concentrations <1 g/t Au. In general, the reproducibility for preparation duplicates was similar to previous periods and within expected ranges. Results for pulp duplicates were very similar to data for preparation duplicates; reproducibility issues were noted in the finer-ground materials. The reproducibility was similar to the results for preparation duplicates for the Detour Lake deposit and within expected ranges. There was no bias evident between original and duplicate halves of the drill core.

A metallics versus fire assay comparison was performed on the 2012 Block A data. The subset of samples selected on the basis of original 50 g fire assay determinations agreed reasonably well with the FA-MET re-analyses. Selected sample pulps and core samples originally assayed by SGS Don Mills were re-assayed at SGS Cochrane. SGS Don Mills assays were biased high by 4.84% when compared to the SGS Cochrane assays on the suite of samples selected for check assays. SGS Cochrane reported on average 5% low on the standards included with samples, suggesting that the two sets of assays were comparable.

The QA/QC samples included in the 2016 West Detour drilling had the following insertion rates: coarse blank, 1:20; and standard, 1:20. Standards used were from Oreas. The blank material was crushed limestone. Core duplicates were omitted from this drilling program following a review of historical duplicate data. There was no evidence of systematic gold contamination based on the blanks that were inserted with the samples. The standard data results were in an acceptable range.

The Zone 58N drilling programs from 2014–2017 had coarse blanks and standards inserted at a 1:20 rate. Standards were sourced from OREAS (Australia). No duplicates were used. The blank material was a crushed limestone. There was no evidence of systematic gold contamination based on the blanks that were inserted with the samples.

Standard re-assays were not requested if the results were within ± 10 –15% or within waste rock. Plotting of the standard results for 2014–2015 showed a low bias for samples processed prior to August 2014; however, most were within the -15% range. Review of the 2016 standard results indicated an issue with the gravimetric fire assay method. Investigation showed that the Au-GRAV assay was being done on a 10 g sample instead of the 50 g and this smaller sample caused problems when trying to remove the silver from the doré bead. Detour Gold instructed ALS Vancouver to discontinue assaying using FA-GRAV on <20 g of material, and discontinue FA-GRAV if the original sample assayed <5.0



g/t Au. In 2017, the blank material was changed to a silica sand. The 2017 standard results were considered to be acceptable.

11.7.3 Kirkland Lake Gold

Kirkland Lake Gold implemented a systematic QA/QC program for its 2020 exploration drilling program which includes the insertion of one standard and one coarse blank material every 20 samples dispatched. One coarse blank or a standard is inserted within every 10 samples. The standard is generally inserted close to samples that are anticipated to be auriferous. Where visible gold is observed a high-grade standard is placed prior to the sample and a coarse blank is placed after the sample along with a wash code designation communicated to the analytical laboratory to ensure a silica wash is completed immediately after the sample containing visible gold is crushed.

Kirkland Lake Gold uses six OREAS gold standards sourced from Australia, specifically OREAS209 (1.58 g/t Au), OREAS216b (6.66 g/t Au), OREAS217 (0.338 g/t Au), OREAS219 (0.76 g/t Au), OREAS223 (1.78 g/t Au), and OREAS231 (0.542 g/t Au).

At ALS Vancouver, internal laboratory checks include the insertion of one blank, two standards, and three duplicates for every 78 samples (per fusion furnace).

QA/QC conducted by Actlabs consists of the insertion of two blanks every 24 samples, one preparation duplicate every 50 samples, one laboratory duplicate every 10 samples, and multiple standards for every 24 samples.

SGS Laboratories QC materials include method blanks, replicates and reference materials and are randomly inserted with the frequency set according to method protocols at ~12%. QC materials will also include barren reference materials, or preparation blanks and preparation duplicates if samples have been taken through the sample reduction process. Verification of balance calibration is performed daily.

AGAT Laboratories ensures certified reference materials are weighed and processed at least every 20 samples or once per fusion set if the set is less than 20 samples. Replicates and duplicates are chosen at random and are processed every 20 samples or once per fusion set if the set is less than 20 samples.

11.7.4 Grade Control

QA/QC of all RC and blast holes is monitored on a daily basis using an acQuire database system. All assays that pass QA/QC are accepted into the database, while assays that fail the QA/QC are reanalyzed by SGS Cochrane as per the mine's QA/QC procedure.

11.8 Databases

The original Detour Gold database consisted of three Access databases covering three different projects Detour (Main Mine), Regional, and West. Kirkland Lake Gold merged the three databases into one Fusion database with each drill hole being applied a "Project

Number” that reflects the Access database they originated from. Two business units were created in the Fusion database to retain the old data while allowing for new rules to be applied for future logging (limits for sample lengths, overlaps in data, etc.). The “HISTORIC” business unit contains all the data from the Access databases and the DETOUR business unit will be used for future logging. Any discrepancies or questions were directed to the database manager who created the Access databases.

The Fusion tables were set up with fields to effectively enter new data while retaining the original data from the Access database. Fields containing original data that were altered during migration are not available to the loggers for future reference but can be accessed by querying the database. Reference tables were created for drop-down pick lists that consist of a comprehensive compilation of the data in the Access databases.

Kirkland Lake Gold performed a major data verification exercise during the data migration to Fusion. Verification procedures included the review and modifications of coordinates, surveys, samples, lithologies, alteration, mineralization, deformation, structure, veining, and RQD data.

Currently, logging and geotechnical data are directly uploaded from the logging software directly into the Fusion database. Collar survey data are uploaded from a differential global positioning system (DGPS) Topcon GR3 instrument with a Nikon total station instrument to the fusion database in UTM coordinates. The down-hole survey data source from the Reflex Gyro Sprint-IQ and Reflex EZ Trac instrument are uploaded using a computerized hub. The SG measurements are hand-entered into the database.

All data are checked using inbuilt software checking routines.

11.9 Sample Security

11.9.1 Legacy

The information on compilation of the legacy data into a database is abstracted from Kallio (2006).

The vast majority of samples appear to have been collected by experienced and knowledgeable personnel working for Placer, Campbell, Amoco and Pelangio at core facilities located at or quite near to the site of drilling. The facilities used by Amoco and Campbell would have been located at an exploration site with relatively restricted access, and those by Placer Dome were at an operating minesite which would have been monitored closely by personnel from both the Security and Geology departments, with relatively limited access to others. The facilities used by Pelangio were located close to the original mine buildings.

Procedures for sampling, handling, shipping and analyzing the samples were defined by personnel from each company who were considered to be competent and knowledgeable in their respective fields of work. Sample tagging by Placer, for at least the later parts of the mine life, was done using a bar code system, which should have resulted in less possibility for analytical errors. Transportation of samples to the assay laboratory from early programs

was by air and/or ground transport with minimal ability for tampering by outside personnel. Transportation of most of the later samples collected by DMG, which were being processed at an onsite laboratory, was by a truck driven by workers at the site. Transportation of samples collected by Placer Dome and Pelangio, which were being processed at off site laboratories would have been by a truck driven by employees working on the drill programs or bonded carrier.

11.9.2 Detour Gold

Sample security was monitored by Detour Security and Exploration Staff. Samples were placed individually in plastic bags and transported within marked and sealed rice bags by courier directly to analytical laboratories. Sample collection from drill point to laboratory relies upon the fact that samples are either always attended to, or stored in the locked on-site preparation facility, or stored in a secure area prior to laboratory shipment.

Chain-of-custody procedures consist of sample submittal forms to be sent to the laboratory with sample shipments to ensure that all samples are received by the laboratory.

11.9.3 Kirkland Lake Gold

Samples are directly shipped from site, using Gold Heart Courier to certified off-site analytical laboratories for preparation and assaying. All sample shipments leaving site are tracked by the Kirkland Lake Gold–Detour Lake site warehouse. Analytical laboratories send sample receipt confirmation to Kirkland Lake Gold representatives and verify all samples are received for the appropriate dispatch.

11.10 Sample Storage

Detour Gold compiled a complete inventory of the historical core on site. Much of the early historical drill core is in deteriorating condition due to decay of the core trays.

Many of the older pulps and rejects from both Detour Lake and West Detour were stored in a dome (WeatherHaven tent) in Cochrane. During a severe snowstorm in the winter of 2016, the dome collapsed and the subsequent winter snow and spring rain damaged the cardboard boxes (shrink-wrapped with plastic on wooden pellets). Following the removal of the collapsed structure, many of the boxes were damaged and not recoverable. The pressure of two layers of pellets crushed the cardboard boxes with water penetrating bags or erasing markings on boxes and on pulp envelopes. The recoverable portion was moved to permanent storage facilities at site.

All pulps since 2014, and most of the rejects, are stored at Kirkland Lake Gold's Cochrane facility.

All core boxes in which samples were collected during the Detour Gold and Kirkland Lake Gold programs were placed in steel core racks or on pallets at the Kirkland Lake Gold core storage facility, which is not guarded but is located within the mine site controlled area.

All core boxes in which samples were collected during the 2020–2021 exploration programs were placed in steel core racks at the onsite exploration facility, or on pallets and stored in designated core storage areas, which are not guarded but reside within the mine site controlled area. All 2020–2021 pulps, and most of the rejects, are either stored onsite or are remain in storage at the Actlabs, SGS Cochrane, AGAT and ALS Vancouver facilities.

11.11 Comments on Sample Preparation, Analyses and Security

In the opinion of the QP:

- Sample collection, preparation, analysis and security for core drill programs are in line with industry-standard methods for gold deposits at the time the samples were collected;
- Drill programs included insertion of blank, duplicate, and standard reference material samples;
- QA/QC methods are practiced during density measurement programs, which are industry leading practices;
- QA/QC program results do not indicate any problems with the analytical programs (refer to discussion in Section 12);
- Data are subject to validation, which includes checks on surveys, collar co-ordinates, and assay data. The checks are appropriate, and consistent with industry standards (refer to discussion in Section 12);
- Retained core has been catalogued and is stored in designated core storage facilities.

The QP is of the opinion that the quality of the gold analytical data is sufficiently reliable to support Mineral Resource estimation without limitations on Mineral Resource confidence categories.

12.0 Data Verification

12.1 Historical Verification Programs

12.1.1 2005–2006

Very little data verification work was documented prior to 2005. Kallio (2005, 2006) completed an initial verification program of the historic drill hole database and conducted some independent check sampling of the pre-2004 and Pelangio assay data (Kallio, 2006). The validation of the database information versus the historical records did not return any significant errors. Only minor discrepancies related to data entry errors, inconsistent coding, rounding errors or missing data were identified. Independent check sampling of 96 historical drill core intervals indicated poor correspondence of grades between historic and new assays, high variability between duplicates and tendencies for most new assays to be lower than the original. Additional data verification on the Pelangio drilling indicated minor errors in the database. Check assays of core, pulps and rejects were also conducted. Results from the check assays showed a significant variability between comparative assays with higher values returned from the check assays.

Kallio (2006) also conducted some comparison of assays results from different drill programs located within a test block of the Detour Lake deposit and comparisons between paired Pelangio and historic holes in close proximity to each other. Results indicated significant variation in average grades between each drill programs at different cut-off grades with Pelangio holes having the highest average grade. Reasons for these differences were not identified and it was suggested that the unknown quality of historic assay procedures, inconsistent determination of historic capping levels, small core size and historic assay averaging may have contributed to the discrepancies. Kallio (2006) recommended additional verification of the historical assay.

In 2008, WGM conducted some independent check sampling of the Detour Gold assay data with no significant database verification.

12.1.2 2009

As part of the pre-feasibility study (Met-Chem, 2009), further database verification work was carried out in early 2009 by Scott Wilson Roscoe Postle Associate Inc. (Scott Wilson RPA). The database verification program consisted of a review of the digital database against all available data including original logs, survey documents, assay certificates, underground void wireframes, topography, and plotted maps. Collar coordinates, downhole surveys, geology and assays were checked from a random selection of drill holes from each historic drilling campaign. Additional checks were completed on specific holes that could have a significant effect on local high-grade block estimates and holes that were questionable due to location or inconsistent data.



As Detour Gold drill hole data and underground voids were captured independently of each other, an additional validation comparing their relative locations was conducted. Although the distances between drill hole breakthroughs and voids vary, most breakthroughs could be explained by the presence of a modeled void in the vicinity.

Checks on duplicate pulps, preparation samples and core samples were carried out on the Detour Gold drill hole data. Results indicated that precision of all samples, including pulp duplicates, was extremely variable even at low grades. Assay precision will influence the selection of appropriate grade interpolation parameters and method for resource estimation.

Scott Wilson RPA concluded that the drilling, data collection and QA/QC procedures undertaken by Detour Gold corresponded to industry standard practices and were considered to be acceptable.

Scott Wilson RPA conducted studies to assess drill hole data reliability for use in resource estimation. Comparisons were run between Detour Gold holes and all other previously drilled holes within separate domains and test blocks for Detour Lake.

Results indicated that over large domains, average grades showed reasonable to poor correlation; however, similar distinct trends existed locally between the datasets. Historic holes generally contained local higher average gold grades compared to Detour Gold holes and reflected local trends dependent on hole locations. Detour Gold assays were distributed at relatively equal spacing throughout the domains and may be more representative of the overall gold grades.

Scott Wilson RPA recommended additional studies to assess the validity of historic underground holes especially in the area below the current influence of Detour Gold surface holes (5,900 metres elevation) involving reconciliation of historic assays with underground production (after final stope models have been generated) and additional data collection at depth.

Scott Wilson RPA was of the opinion that the database finalized in June 2009 was valid and acceptable for use in Mineral Resource estimation work.

12.1.3 2009–2010

As part of the Detour Lake feasibility study, SGS Geostat conducted an extensive statistical review and data verification program in late 2009 (BBA, 2010). The data verification program included

- Verification of the drill hole database versus historical records;
- Independent check sampling of some historical assay data;
- Drilling of five independent holes designed to twin recent Detour Gold holes and historical holes;
- Total gold analysis of 24 composites located with a test block using gravity concentration and cyanide leaching.

The SGS Geostat data verification program led to the following conclusions.

Comparison of the mean gold grade in the same block between the Detour Gold analytical data and the historical data showed a mean grade systematically higher for the historical data. In order to diminish this discrepancy, the missing assay values from the historical drill holes were replaced with 0.01 g/t Au.

Check sampling had identified a potential positive bias for the historical assays from hole CRL-039. In order to quantify the effect of a potential analytical bias toward some of the historical drill assays, SGS Geostat conducted a resource estimation exercise on the mineralized Domain 2 with the objective of quantifying the effect of the CRL series assays on the overall gold content of the mineralized domain. Based on these results, SGS Geostat considered the effect of removing the historical CRL series drill holes to be insignificant compare to overall gold content in the Detour Lake deposit.

The twin drilling campaign conducted as part of the independent verification program showed a fair to good correlation between the historical and Detour Gold assay data collected from the twin drill holes. From the total of five holes completed for this test, hole CRL-030 was the only hole showing poor correlation with the original data.

Total gold analysis (using gravity concentration coupled with bulk cyanidation) was conducted over 24 recent drill sections contained within a test block located just west of the former Campbell pit to characterize the nugget effect for a localized area of the Detour Lake deposit. Results showed a good relationship between the calculated head grade from the total gold analysis data and the fire assay data used by Detour Gold. Overall, the program demonstrated that the original fire assays used by Detour Gold in the test block area was a good approximation of the total gold content estimated from the gravity and cyanidation test work.

12.1.4 2010–2011

As part of the 2010 and 2011 year-end Mineral Resource estimation updates, SGS Geostat conducted independent check sampling on selected 2010–2011 Detour Gold drill core and independent measurement of the SG on the check core samples to validate the average SG value of the Detour Lake deposit.

Independent check sampling was carried out on 60 samples selected from drill holes in 2010 and 57 samples selected from drill holes in 2011. Overall, the assay results of the duplicate samples showed a good correlation with the original assays except for the samples with high gold values. For 2010, all the samples with gold >5 g/t returned gold values lower than the original samples. For 2011, eight samples were originally higher than 5 g/t Au, with four (or 50%) returning gold values greater than the original samples. Based on sorted average values, 13 samples for 2010 and 2011 were >5 g/t Au, which was not enough to statistically define any analytical bias for these high values. However, the results showed significant variability of the high-grade samples due to the nugget effect and the importance in the application of a conservative capping of the assays used for the Mineral Resource estimation. A significant variability was observed between the original and

duplicate results. The variability observed for the duplicate samples was in line with Detour Gold's QA/QC results for half core duplicates collected since 2007.

12.1.5 2012–2013

As part of the 2012 and 2013 year-end Mineral Resource estimation update for West Detour, SGS Geostat conducted an independent analytical check program during 2012 and 2013 on selected Detour Gold drill core (from 2011 and 2012) in the western part of the Detour Lake deposit and eastern portion of the West Detour deposit, and on selected Trade Winds drill core in the western portion of the West Detour deposit. A total of 193 quarter-core samples selected from drill holes series DG11 (30) and DBKA (36) as well the Trade Winds drill holes series TWDDH (127) were analyzed, along with selected standards and blanks.

12.1.6 Verification of the Detour Gold Drill Holes

In November 2012, SGS Geostat performed different statistical tests including lognormal student T-test and sign test on the data from the independent sampling program on the DG and DBKA series (total 66). SGS Geostat could not confirm the presence of any bias on the independent samples series from the Detour Gold samples. Overall, the assay results of the duplicate samples showed an average correlation ($R^2=0.5$ for log values) with the original assays except for the samples with high gold values. The average grade of the Detour Gold sample series was 2.37 g/t Au and for the SGS Geostat series, the average grade was 2.27 g/t Au. Fourteen of the 34 duplicate gold values >1.0 g/t Au returned values lower than the original samples. The 34 samples >1.0 g/t Au were not sufficient to statistically define an analytical bias for these values. A contributing factor to the discrepancy could be due to sampling quarter core rather than half core. However, these results showed the significant variability of the high-grade samples due to the nugget effect and the importance in the application of a conservative capping of the analytical composites used in Mineral Resource estimation. Significant variability was observed between the original and duplicate results. This behavior in the variability duplicate samples was expected due to the significant nugget effect observed at the Detour Lake and West Detour deposits. The variability observed for the duplicate samples was in line with Detour Gold's QA/QC results for half core duplicates collected since 2007.

12.1.7 Verification of the Trade Winds Drill Holes

In July 2013, SGS Geostat performed different statistical tests including lognormal student T-test and sign test on the data from the independent sampling program on the TWDDH series drill holes (127). A total of 125 original and check fire assay results were retained to verify the same procedure. The sign test and student T-tests performed on the fire assay results showed a bias towards the original Trade Winds samples.

Overall, the assay results of the duplicate samples sent to ALS Minerals returned values lower than the original values, with only 49 of the 125 fire assay results being over the

original results. The fire assay results showed an average correlation ($R^2=0.8$ for log values) with the original assays. The average grade of the Trade Winds sample series was 2.03 g/t Au and SGS Geostat was 1.34 g/t Au. Sixteen of the 23 duplicate gold values between 1.0–5.0 g/t Au returned values lower than the original samples. The sign test performed on all 125 pairs (fire assay results) of values indicated a bias when considering the whole population. By sorting according to the original values of Trade Winds samples, there was a bias present for values >9 g/t Au (eight duplicates lower versus one duplicate higher). The selection of high-grade intervals may have influenced this result. SGS Geostat found that the Trade Winds sample grades (average) were almost always higher than those of the control data. This observation was systematic and significant enough to warrant further investigations. A contributing factor to the discrepancy could be attributed to duplicate assays being done on a smaller sample size coming from a quarter of the core instead of half core. SGS Geostat found that there were about as many Trade Winds data points (135,000 assays, 39% of overall data) as Detour Gold (122,000 assays, 35% of overall data) in the database, and the remainder came from prior historical drilling (92,000 assays, 26% of overall data).

In order to assess the impact of the TW series data on Mineral Resource estimation, SGS Geostat carried out grade interpolations using the same procedures while removing the TW series. Results from this exercise indicated that the Mineral Resource estimate obtained was very similar, using the same gold cut-off grade.

It was SGS Geostat's opinion that the Trade Winds database was valid and acceptable for use in Mineral Resource estimation studies. However, they recommended that further monitoring be completed to investigate this potential bias on the estimation of Mineral Resources.

12.1.8 Follow up on Trade Winds Drills Hole Verification

In late 2014, Detour Gold located and conducted test sampling on 63 original Trade Winds coarse rejects and pulps from the samples used by SGS Geostat in their 2012–2013 verification. Although the sample amount is limited, no significant bias was found. Forty-one samples were within 10% of the original assays, 12 samples returned results values higher than 10% of the original assays, and 10 samples returned values lower than the original assays.

An additional 218 original coarse rejects and pulps were located for Trade Winds (125 from TWDDH series) and Detour Gold (93 from DBKA series). Similar results were found. Of the 125 Trade Winds samples, 79 returned assays within 10% of the original values, 25 returned higher assays and 21 returned lower assays than the original assays. Of the 93 Detour Gold DBKA samples, 63 returned assays within 10% of the original values, 20 returned higher assays and 10 returned lower assays than the original assays.

Results of the new assays from original coarse rejects and pulps from the TWDDH and DBKA drill series showed good reproducibility given the natural variability of gold due to high nugget effect. The results validated the original assays from pulps and rejects.

However, it did not explain the discrepancy between original assay values and results obtained when submitting second half of remaining core from earlier Trade Winds core holes. The prior test used quarter-core and concentrated on high grade zones only, which may have biased the results. It was therefore decided that twinning some TWDDH would be the best way to validate the original assay results. A twin drill hole program was completed in 2016 (see Section 10.9).

12.1.9 Zone 58N Deposit Data Verification

Assay Certificate Verification

Third-party consultants G Mining randomly selected several assay certificates in .pdf form from each year, and visually compared them with the assay flat file. In addition, the .csv files were cross-checked with the assay flat file using the sampleID as the key field and Excel formula.

G Mining did not find any discrepancies and believed that the integrity of the drilling database as reviewed was high.

Intra-laboratory Check Assays

Intra-laboratory check assays were undertaken at both Actlabs (2016) and SGS Cochrane (2017) for comparison with the results obtained from the routine laboratory (ALS Vancouver).

In 2016, 92 samples from 20 drill holes were analyzed at Actlabs, where the fine fraction pulp was sent and analyzed using the typical analysis route (fire assay followed by AA finish, with samples >5 g/t Au being sent for gravimetrics where possible). Due to the extreme nugget effect observed at Zone 58N, the fine fraction material was considered the most appropriate to test for intra-laboratory bias.

In 2017, 50 samples from five drill holes were analyzed at SGS Cochrane. The fine fraction showed very good repeatability between the two datasets. The 2016 results have a minor high bias to ALS Vancouver when samples are <1 g/t Au and the 2017 results have a slight high bias to SGS Cochrane when samples are <3 g/t Au.

12.2 External Data Verification

12.2.1 Wood

Kirkland Lake Gold requested that third-party consultants Wood Canada Limited (Wood) perform a due-diligence audit of the Mineral Resource estimate (3 June 2020 model) for the open pit. The audit was performed in five phases: geology, data evaluation, resource modelling, resource model validation and reporting, and a risk and opportunity assessment. Kirkland Lake Gold personnel addressed items arising from the review at the end of each stage. Wood's opinion was that the overall model construction was reasonable and suitable for reporting Mineral Resources within the open pit and the Mineral Resource confidence

classification was reasonable. The overall geological interpretation and estimation domains, used in conjunction with dynamic anisotropy, were shown to be a reasonable approach for the open pit model. The model, however, was not considered suitable for higher-grade underground mine planning or resource reporting. Wood recommended that a new dynamic anisotropy model for future high-grade underground models be constructed.

12.2.2 John Kinneberg

Kirkland Lake Gold also had a third-party mining expert, John Kinneberg, audit the 2020 LOM plan. That audit was conducted in two phases, one which focused on open pit mine design, production schedule, and cost estimates, and a second, which consisted of a risk and opportunity assessment. The objective of the audit was to confirm that each step in the mine planning process was appropriate and based on information of suitable quality.

The audit was conducted in sufficient detail to verify the accuracy of supporting information, verify methods used and independently validated critical steps or estimates by reviewing pertinent documentation, fundamental data, and verification of inputs and assumptions. No major items for remediation were noted from the audit.

The main risk and opportunity recommendations included the development of a consistent methodology for Mineral Resource modelling for all three deposits; development of detailed operational procedures for bench mining; and incorporation of reclamation activities and closure plan-related activities in the LOM production schedule.

12.3 Kirkland Lake Gold Verification Programs

Verification programs include daily sample dispatch review and reporting, review and approval of drill logs prior to uploading into the Fusion database, and review and authorization of received assay data by the Senior Database Administrator and the QP prior to uploading into the Fusion database.

12.3.1 Drill Data Verification

A complete verification and validation of analytical, geological, and survey information was completed for the data supporting this Report from January 2020 to July 26, 2021.

The validation strategy included:

- Confirming accurate information is present on the collar sheet including drill hole status, drill hole information, collar information, drilling information, logging information, hazard identification;
- Adding new hole flags to make tracking of wedges, collar issues, and hole hazards easier;
- Ensuring there are no gaps in the lithology entries including confirming that overburden and wedge re-starts are accurately captured;

- Confirming that survey data were imported for all drill holes including restarts;
- Confirming that the end-of-hole reported matched the core measured and lithology logged.

A validation table was created verifying that all pertinent drill information had been reviewed. Data verification included:

- Primary utm, secondary mine grid, area, sub area, claim #, lease #;
- Planned azimuth, planned dip, collar accuracy, survey instrument, survey date;
- Surveyor, reason if abandoned, drilling started date, drilling completed date;
- Extension date, extension depth, core storage, total # of boxes, notes;
- Casing status (cemented-plugged-water), wedge information, reason if abandoned;
- Hazards, no gaps lithology, final lithology depth, original end-of-hole, final survey depth;
- Survey type, end-of-hole, survey imported, survey direction, survey @ 0 m;
- All assays imported, QC check, photos on network, validated, drill rig;
- Other comments, wedge depth, wedge degree, start azimuth, end azimuth;
- Start dip, end dip, degrees gained azimuth, degrees gained dip.

12.3.2 Down-Hole Survey Verification

In 2021, Kirkland Lake Gold completed down-hole surveying on 10 of the legacy drill holes using a Reflex Gyro Sprint-IQ instrument. These included four Tradewinds drill holes, two Placer Dome drill holes, and four Detour Gold drill holes. There were no significant differences noted between the original surveys and the 2021 re-surveys.

12.3.3 Quality Control and Quality Assurance

QA/QC protocols are in place to identify any irregularities with respect to the precision and accuracy of the data received from the analytical laboratories. The insertion of standard and blank materials into the sample dispatches to external laboratories allows for an external check on the accuracy and precision of the contract laboratories.

The primary concern and subsequent remediation identified by the protocols set in place by Kirkland Lake Gold were primarily attributed to field errors associated with the insertion of standard and blank materials by core technicians. It was noted that the size and scope of the project, which involved core logging and cutting, sampling, and dispatching of an average of 700 samples per day, contributed to sample swaps which occurred periodically during the insertion of standards and blanks. In every case where a standard or blank failure was determined by the Senior Database Administrator, the QP reviewed and

provided direction as to whether to accept the results associated with the failure or to re-assay the sample series associated with the failure.

Initially Kirkland Lake Gold used six OREAS gold standards (see Section 11.7.3). To better determine whether analytical failure was a result of standard swaps or the analytical process, the supply of standard OREAS209 (acceptable range of 1.448–1.712 g/t) was exhausted before OREAS223 (acceptable range of 1.645–1.915 g/t) was inserted. In cases where the standard and blank swaps were less evident, the sample series was re-assayed.

When failures were attributed to the laboratory performance, every fail was reviewed by the QP and direction was provided. The direction was recorded within the Fusion database.

Generally, when laboratory failures were evident but had analytical results close to the expected value for the specific standard or blank, the sample series associated with the failure were:

- Re-assayed when it occurred within a mineral domain;
- Accepted when it occurred in broad waste sections of the drill hole.

For all other laboratory failures that were not close to the expected standard or blank material values, the sample series associated with that sample were re-assayed.

Kirkland Lake Gold produced monthly assay quality control and statistical reporting for each individual contract laboratory. Laboratory failures and field errors interpreted to be sample swaps were included in the statistics and monthly reports. The monthly reporting also summarized the precision and performance of each laboratory, including samples submitted, samples analyzed, statistical analysis for each laboratory, and analytical results for standards, blanks, and laboratory duplicates.

12.3.4 Laboratory Check Assays

A check assay program was commissioned in December 2020. As at the database closeout date for resource estimation, a total of 5,273 assay results from 8,929 samples submitted had been received.

The program purpose was to assess the accuracy of assay grades reported by each contract laboratory by comparing the primary laboratory results to those reported by a secondary laboratory. One-hundred-gram splits of pulp material prepared by the primary laboratory was submitted to the secondary laboratory and analyzed using the same procedures and QA/QC controls as the initial analysis.

The 2020–2021 program consists of analyzing approximately every 15th sample in each dispatch for QA/QC purposes. Each laboratory used during the drill campaign was instructed to send 100 g splits of pulp material for every 15th sample back to Kirkland Lake Gold. The pulps were sorted and sent to either ALS Vancouver or Actlabs to be check assayed.

Grade Distribution

Overall, there is a good spread of grade representation in each of the batches of assays returned (Figure 12-1). Approximately 11% of samples fall below 0.0025 g/t Au, 58% have a grade between 0.0025–0.1 g/t Au, and 15% have a grade between 0.1–0.3 g/t Au. The remainder of the samples have the following distribution:

- 5% fall between 0.3–0.5 g/t Au;
- 5% fall between 0.5–1 g/t Au;
- 4% fall between 1–3 g/t Au;
- 2% have grades >3 g/t Au.

The AGAT Laboratory has a different minimum detection level than the other laboratories (0.001 g/t Au) which skews the statistics slightly.

Grade Comparison

To date, check assay values received represent approximately 60% of those submitted. Overall, the grades reported were very similar for the check assay program.

A plot of the original assay value compared to the check assay value, included as Figure 12-2 shows that the assays returned are similar, with more outliers occurring at higher grades (as expected due to the nuggety nature of gold). The data plots with a correlation coefficient of 0.8036, where a perfect correlation would be 1. The variability in higher-grade samples obvious in Figure 12-3, which shows the original grade versus the check assay grade.

12.4 Verification Completed by the QP

Verification completed by the QP includes site visits, review of geological data collection and checks that the QA/QC procedures used by Kirkland Lake Gold are consistent with standard industry practices.

12.5 Comments on Data Verification

A number of data verification programs for Detour Lake and the West Detour project deposits were carried out by independent consultants and Detour Gold personnel over time.

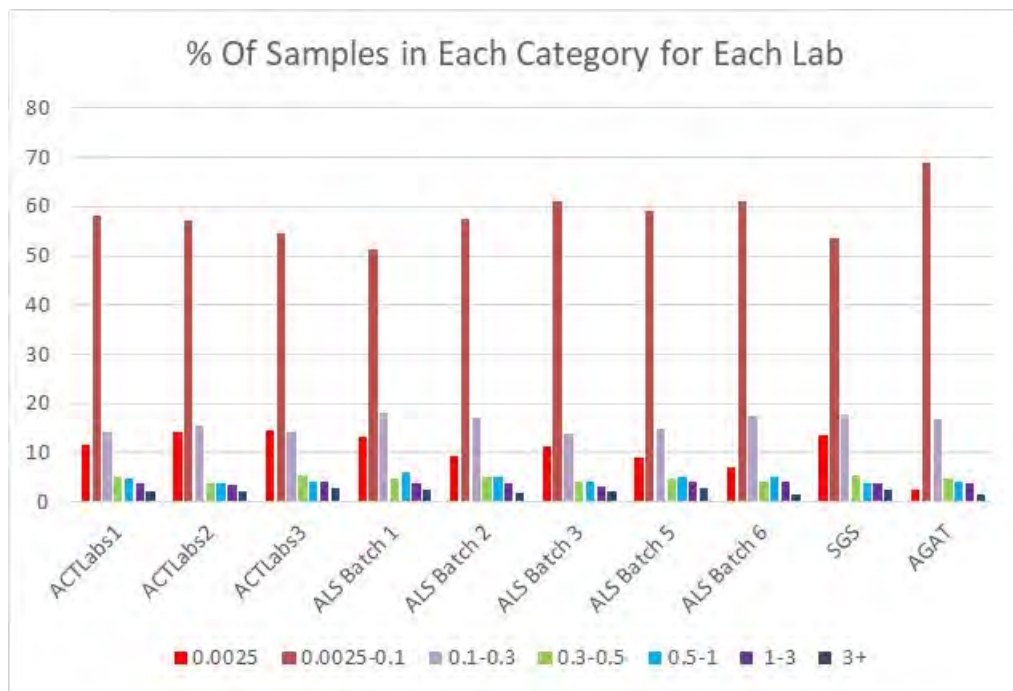
Kirkland Lake Gold personnel re-verified the entire database during migration of the data from the three Access databases used by Detour Gold to the current Fusion database.

Positive production reconciliation since the start of the mining operations at Detour Lake validates the assumptions of metal content and gold extraction.

The QP considers that a reasonable level of verification has been completed and that no material issues have been left unidentified from the programs undertaken. The data are acceptable to be used in Mineral Resource and Mineral Reserve estimation.

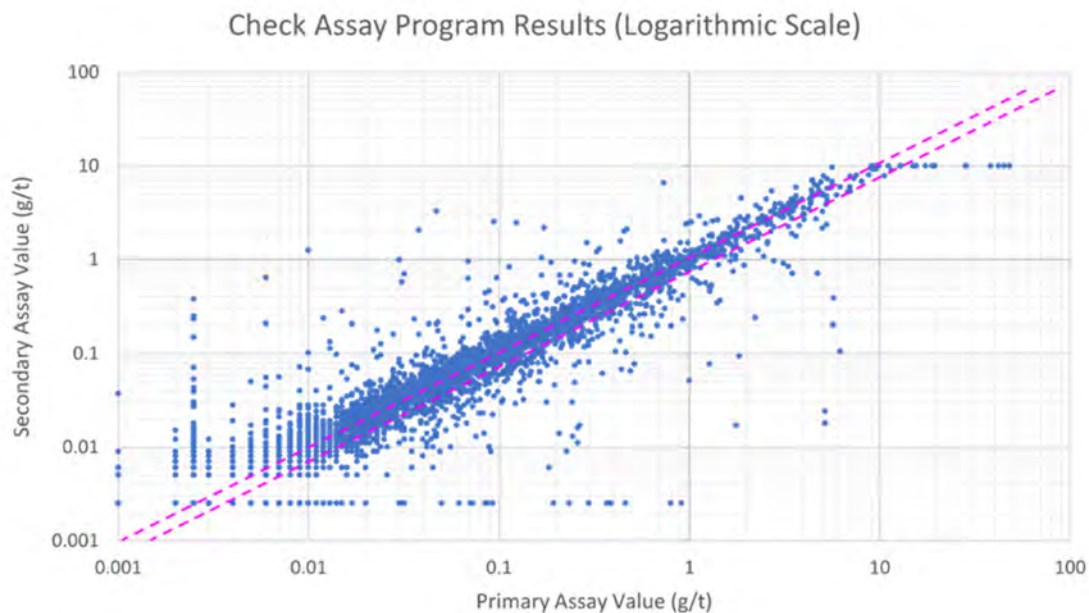


Figure 12-1: Grade Distribution of Received Check Assays



Note: Figure prepared by Kirkland Lake Gold, 2021.

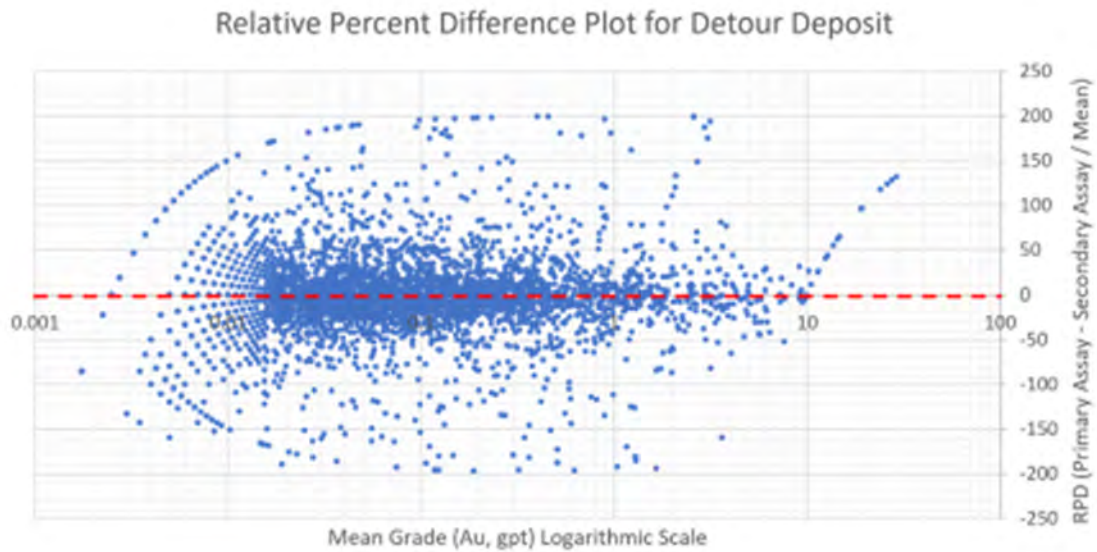
Figure 12-2: Original Au Grade vs Check Assays Grade



Note: Figure prepared by Kirkland Lake Gold, 2021.



Figure 12-3: Relative Percent Difference Plot



Note: Figure prepared by Kirkland Lake Gold, 2021.

13.0 Mineral Processing and Metallurgical Testing

13.1 Introduction

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

Recoveries from Detour Main have been in line with the feasibility study while milling rates have exceeded plant design predictions in that study.

13.2 Historical Metallurgical Testwork

Metallurgical testwork completed as part of the 2009 pre-feasibility study included mineralogical examination; gravity recovery tests, including gravity recoverable gold (GRG) tests; cyanide leach tests on gravity tailings; grade variability testing; barren solution recycle testing; cyanide destruction tests; preparation of tailings for chemical and physical characterization and environmental testing; and environmental testwork.

During the 2010 feasibility study, tests focused on project optimization, and included evaluation of gold recovery versus grind size, use of oxygen in leach and crushing and grinding studies.

Extensive plant testwork proved the benefit of leaching with high oxygen rates and lead nitrate. Three full grinding circuit surveys were completed by Detour personnel and modelled by third-party consultants BBA using JKSimMet to assist with grinding circuit optimizations and characterization.

13.3 Detour Lake/West Detour Testwork Programs and Results

13.3.1 Comminution

A total of 132 HQ core samples were used for comminution tests on eight domains within the Detour Lake deposit. Tests included semi-autogenous grind (SAG) mill comminution (SMC) tests for A and b parameters, drop weight index (DWi), crushing work index (CWi), Bond ball mill work index (BWi), Bond rod mill work index (RWi) and abrasion index (Ai). Specific gravity tests were also conducted, using wax immersion, pycnometer and SMC methods. A total of 61 core samples from West Detour were also subject to comminution tests. The results of those tests were confirmed through the various grinding survey campaigns.

Table 13-1 summarizes the testwork results for Detour Lake. Table 13-2 provides a comparison between the West Detour and Detour Lake tests, using the 75th percentile results. Mineralization from West Detour is softer in terms of RWi and BWi and less abrasive than mineralization at Detour Lake.

13.3.2 Grinding Circuit Simulation

The grindability results from the comminution testing were used to conduct JKSimMet simulations of different SAG mill circuit configurations and operational variables (circulating load, P_{80} , etc.). A SAG-ball-crushing (SABC) grinding circuit configuration was selected for the process plant. In the design, the feed to the SAG mill was subjected to primary and secondary crushing to reduce the feed size to the SAG mill due to the high ore hardness. The grinding circuit design basis was reviewed by third-party consultants Ausenco and SAG Design and was deemed appropriate for the hardness of the ores that the Detour Lake plant would process.

Once the circuit was operational, this model was updated three times with crushing/grinding circuit surveys that served as the basis for circuit optimisation.

13.3.3 Gravity Gold Recovery

The results of the gravity recovery tests performed at the feasibility study stage indicated that gravity recovery was a key component of the milling process for Detour Lake. This was verified with plant data where the plant recovery is clearly influenced by gravity recovery. Figure 13-1 illustrates the plant recovery versus gravity recovery.

During the feasibility study, laboratory testwork recoveries varied from 30–45% (25–75th percentile) to as much as 70%. Similar tests for West Detour indicated that gravity recovery ranged from 20.1–80.4% for the samples tested. This variability was taken to be consistent with the nature of free gold in some samples and more disseminated in other samples. No marked differences in the respective responses were noted between the Main and West areas of the deposit.

Figure 13-2 is a graphic showing the testwork recoveries from the feasibility study versus operating data.

It is therefore believed that the gravity recovery can be increased. This can be substantiated by the fact that the gravity circuit is fed from cyclone feed material vs ball-mill discharge as per the original design. Operational issues prevented feeding the gravity circuit with ball-mill discharge material. However, a new design was developed where cyclone underflow will now feed the gravity circuit. This is expected to increase the gravity recovery.

The other improvement for the gravity circuit is the use of an intensive leach reactor (ILR). The leach reactor leaches the gravity concentrate. The amount of material the ILR leaches limits the amount of gravity concentrate the gravity circuit can generate. If more concentrate can be generated, the gravity recovery will increase.

Table 13-1: Comminution Testwork, Detour Lake

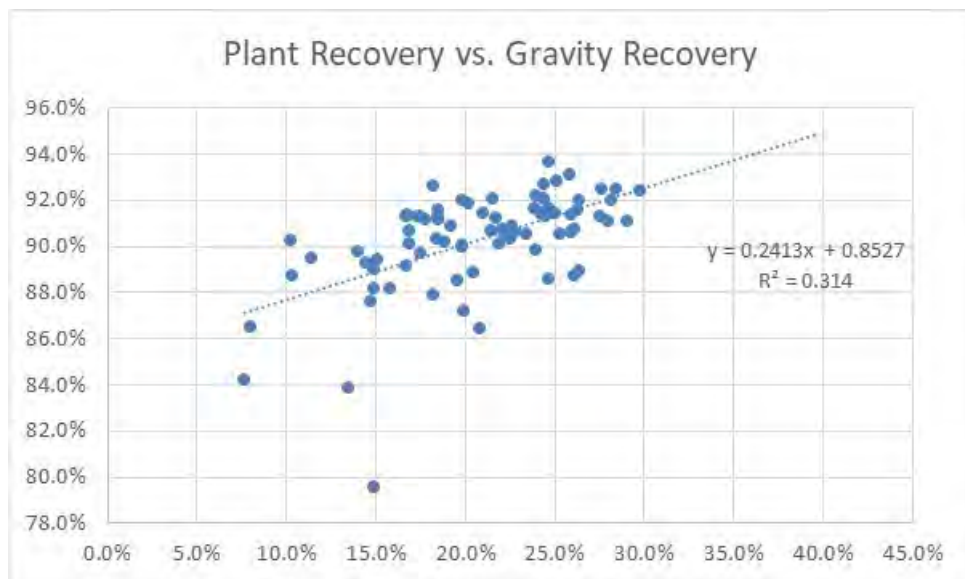
Statistics	SG (g/cm ³)			SMC Test (A x b)	CWi (kWh/t)	RWi (kWh/t)	BWi @150 µm (kWh/t)	Ai (g)
	Wax	Pycnometer	SMC					
Average	2.89	2.89	2.92	26.0	14.2	18.0	14.3	0.421
Minimum	2.49	2.67	2.72	53.1	5.2	12.0	9.1	0.08
10 th percentile	2.74	2.81	2.80	30.2	9.9	15.9	11.2	0.238
25 th percentile	2.82	2.84	2.88	27.5	11.9	17.2	12.7	0.365
Median	2.90	2.90	2.94	25.7	14.8	18.0	14.3	0.484
75 th percentile	2.98	2.93	2.98	24.3	16.9	18.9	15.5	0.54
90 th percentile	3.01	2.98	3.01	23.4	19.7	19.9	16.5	0.544
Maximum	3.19	3.09	3.10	22.5	25.6	22.7	20.1	0.548

Table 13-2: Comminution Testwork Comparison, Detour Lake vs West Detour

Deposit	JKTech Parameters		Relative Density		SG	Work Indices			
	SMC Test (A x b)	DWI (kWh/m ³)	Wax (g/cm ³)	SMC (g/cm ³)	Pycnometer (g/cm ³)	CWi (kWh/t)	RWi (kWh/t)	BWi (kWh/t)	Ai (g)
Detour Lake	24.3	11.4	2.98	2.98	2.93	16.9	18.9	15.5	0.54
West Detour	24.8	11.6	2.98	2.97	2.99	16.4	17.1	13.2	0.38 7
% Difference	-2%	-2%	-	-	2%	-3%	-10%	-15%	- 28%

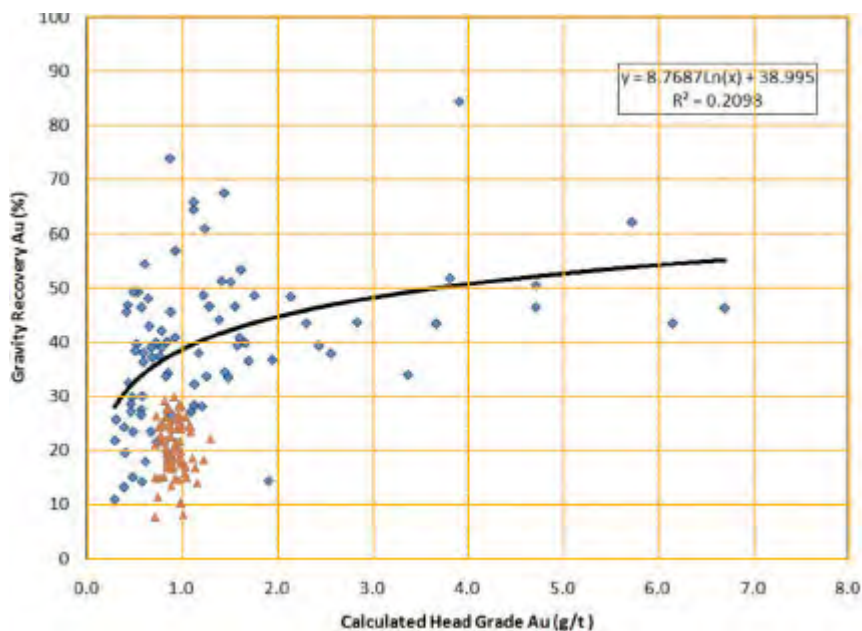


Figure 13-1: Plant Recovery versus Gravity Recovery



Note: Figure prepared by Kirkland Gold, 2020.

Figure 13-2: Feasibility Study Testwork Recovery Predictions versus Operating Data



Note: Figure prepared by Kirkland Lake Gold, 2020.

= feasibility study data.

= operating data.

A time study of the ILR has shown that it is only in leaching mode 52% of the time.

The addition of leach aid to the ILR has also proven to be efficient in improving leach kinetics and reducing the amount of time needed to leach the gold. An automatic dosage system for leach aid is part of the ILR optimization plan.

Other ILR optimization target items are:

- Improved oxygen addition through better sparging;
- Increased drum speed;
- Improved flocculation for desliming.

13.3.4 Leach Test Work

Extensive testwork (leach profiles, final tails re-leach, gold leach kinetics tests) were completed in the plant and in the laboratory to improve recovery. Plant recovery has gone up significantly from 2019 as a result of this work (Table 13-3).

While the leach extraction appears to be robust, it is planned to add a sixth leach tank to each of the leach trains to maintain the recovery at the 28 Mt/a throughput rate.

Circuit modifications to improve oxygen diffusion, reduced leach densities and lead nitrate addition had a significant impact on maintaining and improving recovery in the leaching circuit at the higher throughput rate. For 2020, the average leach circuit profile is as shown in Figure 13-3.

The plant conducts weekly final tails re-leach of the final leach tails to establish potential gold losses. The final tails are re-leached with a very high cyanide concentration (1,000 ppm). After this test is done, the final tails is then re-ground for seven minutes in a small laboratory ball-mill. The grind fineness then improves from 70% passing 75 µm to 80% passing 75 µm. The ore is then re-leached for eight hours at a very high cyanide concentration (1,000 ppm). Results for 2018–2020 are illustrated in Figure 13-4 and summarized in Table 13-4.

The potential to improve the recovery through better grind fineness therefore exists and validate the feasibility test work (Figure 13-5). It is also believed that the gold gained through the intensive leaching represent the potential gold lost due to gravity recovery.

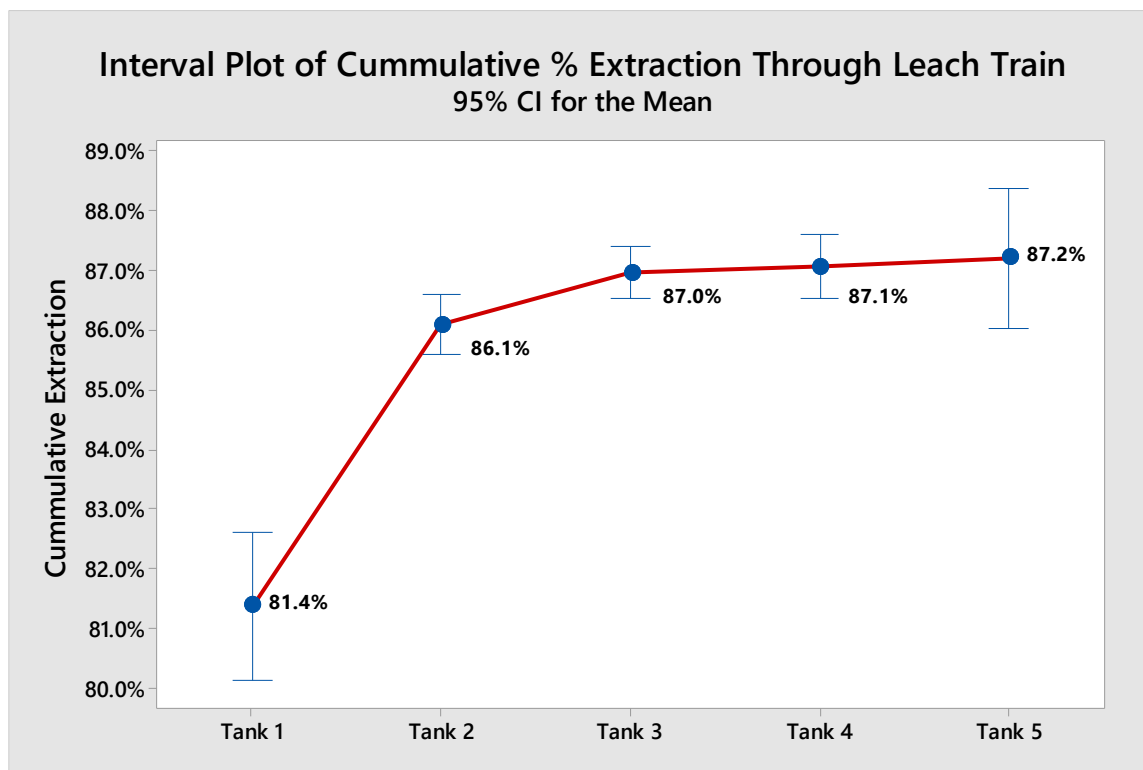
Initiatives to improve the grind fineness include:

- Ball size optimization;
- Process control improvement;
- Increase ball-mill power;
- Reduced hardness of mineralization from Detour West.

Table 13-3: Plant Recoveries, 2013–2020

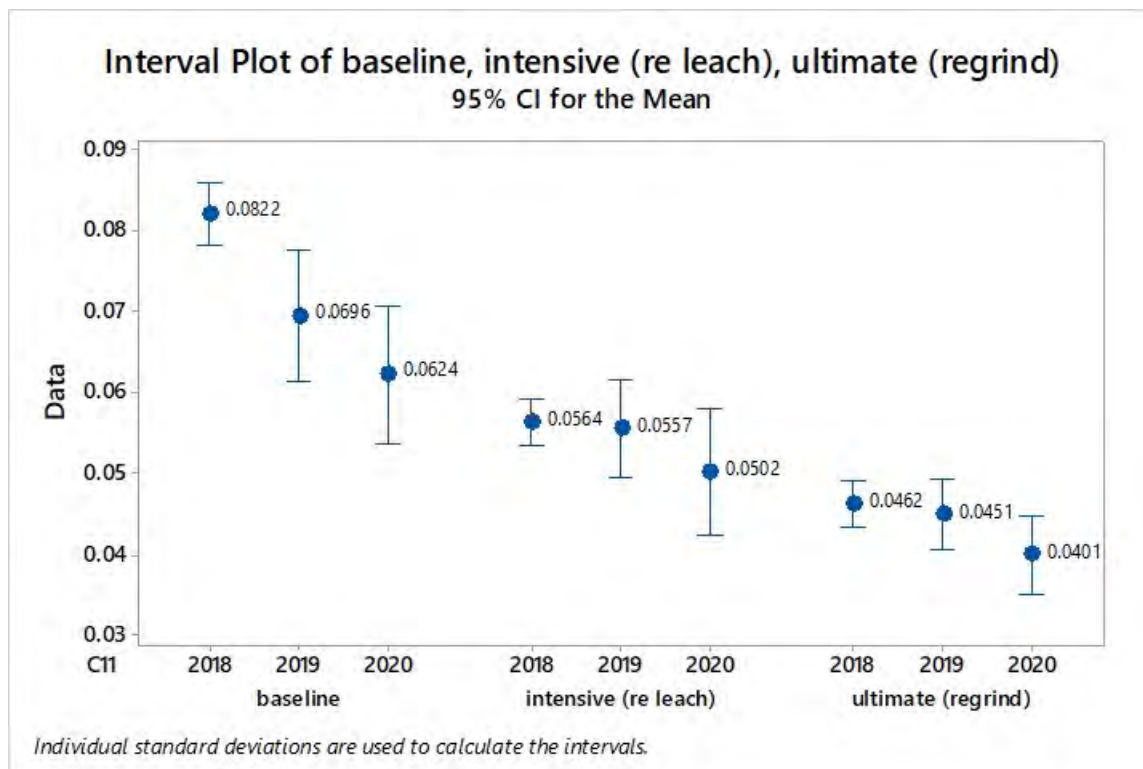
Year	Recovery (%)	Head Grade (g/t)
2013	86.2	0.750
2014	90.7	0.884
2015	90.9	0.876
2016	89.2	0.902
2017	89.6	0.929
2018	90.1	1.038
2019	92.1	0.922
2020	91.3	0.834

Figure 13-3: Average 2020 Leach Circuit Profile



Note: Figure prepared by Kirkland Lake Gold, 2020.

Figure 13-4: Tails Relach Results 2019–2020



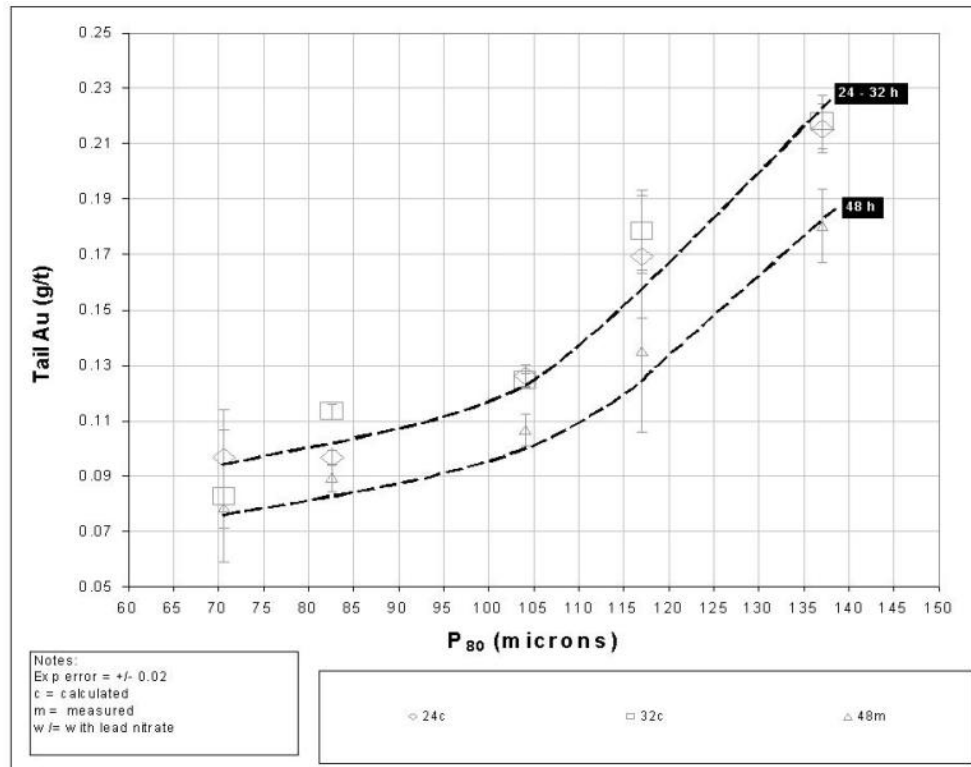
Note: Figure prepared by Kirkland Lake Gold, 2020.

Table 13-4: Recovery Gains, Intensive Relach

Year	Potential Gain in Recovery Intensive Re-Leach (%)	Potential Gain in Recovery Total with Regrind (%)
2018	2.97	4.19
2019	1.42	2.53
2020	1.22	2.23



Figure 13-5: Gold in Tails (g/t) vs. P_{80} , Detour Lake Samples



Note: Figure prepared by Detour Gold, 2011.

Ball Size Optimization

The ball size is key for an improved grind. Since the start of the plant, a blend of 2.5" and 3 1/4" balls were added to the ball mills (70/30). To determine the optimum ball size required for the Detour Lake ore, a grinding circuit survey was performed in 2020. A sample of 500 kg of ball-mill circuit feed was taken and sent to Metcom, a metallurgical consultant, for ball blend testing. The intent of the testwork is to determine the optimum ball size for the Detour Lake ore.

Circulating Load Increase

The Detour Lake ball mill circuit is constraint by a restriction in the ball mill discharge launder. This prevents the ball mill circuit from being optimally run. Usually, a ball mill circuit runs at 350% of the circulating load; however, the Detour ball-mill circuit runs at 250% because of a ball mill launder constraint. This bottleneck will be removed part of the capital improvements program. Gains in grinding efficiencies are expected from this initiative.

Ball-Mill Power Increase

The Detour Lake ball mills have 15 MW motors. A study done by ABB has indicated that the motors can be safely operated at 16.0 MW. To maintain the gear rating of 15 MW, the speed of the ball mill will be increased to maintain the same torque limits. This has been tested and proven to work. Issues with pinion bearing reliability have prevented the implementation of this initiative, but once the pinion issue is resolved, it will be implemented.

Reduced Hardness From Detour West

The Detour West ore is softer for the ball mill than the Detour Main Pit ore. This will translate into finer grinds to going to the leach circuit.

13.3.5 West Detour

Gravity tailings testwork on West Detour samples was conducted to assess sensitivity to grind size and sodium cyanide (NaCN) concentration. Using 0.5 g/L NaCN, gravity + cyanidation recovery was measured to vary from 88.3–98.7%. Recovery was found to increase with finer grind size. Cyanidation recovery response to head grade for West Detour indicated that the grade variability composites were also similar to those from Detour Lake. From a leaching perspective, no adverse effects were predicted when in blending West Detour mineralization with that from Detour Lake as plant feed.

The laboratory cyanide consumption profiles for Detour Lake and West Detour were similar 0.40 kg/t for Detour Lake vs. 0.39 kg/t for West Detour.

13.3.6 Impact of Copper On Recovery and Cyanide Consumption

The Detour Lake mineralization contains copper concentrations varying from 0.025–0.08% with copper dissolution in leach varying from 5–15%. Metallurgical testwork results showed that these extraction rates provided leach solution grades normally varying from 20–60 mg/L in copper content, with outliers in the 80–280 mg/L in grade variation tests when gold grades varied from 2.0–9.0 g/t Au). Data obtained from the process plant are in line with these laboratory observations. It was found that temperature control was the key to limiting copper dissolution. Leach density set-points were dropped to minimise the temperature. With the increase plant throughput, the slurry temperature has dropped over the years. Controlling copper dissolution is key to controlling the cyanide consumption.

13.3.7 Carbon-in-Pulp Solution Losses Reduction

The carbon-in-pulp (CIP) solution losses can be reduced. Historical solution losses are illustrated in Table 13-5. The CIP adsorption profile illustrated in Figure 13-6 supports this assumption.

Table 13-5: CIP Solution Grades, 2017–2020

Year	CIP Tails Solutions (g/t Au)
2017	0.0101
2018	0.0131
2019	0.0078
2020	0.0080

Figure 13-6: 2020 CIP Adsorption Profile



Note: Figure prepared by Kirkland Lake Gold, 2020.

13.3.8 Carbon Losses Minimization

Carbon losses were estimated to result in a 0.4% gold loss in the final tails and are another area where gold losses can be minimized. Capital expenditures to reduce this number are planned, such as replacement of carbon pumps and improved carbon sizing.

13.3.9 Cyanide Destruction

Cyanide destruction uses the SO₂/air method. The current plant performance is in line with the feasibility study test work. A fourth detox tank is planned to be built to sustain the 28 Mt/a throughput rate.

13.4 Zone 58N Testwork

Two testwork phases, Phase I in 2016 with Phase II in 2017, were conducted on 31 samples. A similar metallurgical testing approach was used and aimed at evaluating if the existing processing flowsheet was compatible with processing of Zone 58N material.

13.4.1 Metallurgical Testing

Each sample was ground to a target P_{80} in the range 75–90 μm , subjected to head assaying, mineralogy, and third-party testing.

Material for each composite was processed through a Knelson MD-3 concentrator. In Phase I, the Knelson concentrate was recovered and upgraded further by treatment on a Mozley mineral separator. The Mozley concentrate and the Mozley tailing were each assayed to extinction. For Phase II, the Knelson concentrate was recovered and forwarded to intensive cyanidation testing in order to produce a metallurgical balance for this step. The Knelson tailing from each composite sample was forwarded in its entirety to cyanidation test work. Combining the intensive cyanidation results of the gravity concentrate with the leaching performance allowed the total recovery to be determined.

Bulk cyanide leaches were carried out at 40% solids for 24 hours. The pH was maintained in the range of 10.5–11.0 with the addition of hydrated lime while the NaCN concentration was maintained at 0.5 g/L. An initial dose of 0.1 kg/t of $\text{Pb}(\text{NO}_3)_2$ was added to each test to mimic the current processing facility conditions.

Upon completion of each of the cyanide leach tests, six representative 500 mL pulp subsamples were taken. Each subsample was filtered, and the solids were washed with water. The solids were dried and then a 30 g sample from each was riffled out and sent for gold analysis by fire assay. From the six fire assay beads generated, pairs of beads were combined and analyzed as one in order to lower the detection limit and produce final gold assays in triplicate.

13.4.2 Phase I Results

Eight composites were prepared using 68 interval samples. The gold grades calculated varied from 1.84–15.4 g/t.

The Knelson gravity concentrate showed very high gold recoveries ranging from 75–93% with a mass pull ranging from 0.73–1.15% for the eight composites. The Knelson gravity tailing cyanidation testing from all the composite samples produced gold recoveries ranging from 87–98%.

The gravity tail leaching results showed the final residue tailing gold grade ranged from 0.015–0.157 g/t. Gold recoveries associated with the gravity tails leaching exceeded 90% for all except one sample, which was reported at 87%.

When combining the gold recovered from both the gravity concentrate and the leached Knelson gravity tailing material, the overall gold recovery ranged from 97.5%–>99%.

It was concluded that the composite samples tested are amenable to the gravity separation/gravity tailing cyanidation flowsheet as currently practiced in the existing plant.

The total calculated gold head grades and recoveries (adding all units of operations) for all composites samples exceeded 97.5%.

13.4.3 Phase II Results

Gravity separation showed that 67–95% of the gold in 0.68–1.14% of the mass was recoverable to a Knelson concentrate.

Intensive cyanidation of each of the Knelson gravity concentrates produced gold extractions, ranging from 97.6–99.9%, producing tailing gold grades for this unit of operation ranging from 0.69 g/t equivalent to a net recovery reduction potential range of 0.12–1.79%. At the industrial scale, this intensive cyanidation residue would be recirculated via the milling circuit for additional size reduction and leaching. This step cannot be easily replicated in the laboratory and the final recovery reconciliation assumes full losses associated with the intensive cyanidation step of the gravity concentrate, which therefore represent a worst-case scenario.

The Knelson gravity tailing cyanidation of the for all of the composite samples produced unit of operation gold recoveries, ranging from 84.4–95.4%. When combining the gravity concentrate intensive cyanidation recovery with the gravity tailing cyanidation results, total gold recoveries ranged from 93.9–99.6%.

Phase II testing supported that material from Zone 58N is amenable to the existing plant flowsheet, which already incorporates gravity separation followed by intensive cyanidation of the gravity concentrate and cyanidation of the gravity tailings.

The calculated gold head grades varied from 0.75–35.5 g/t.

13.4.4 Consumables

Cyanide and lime consumptions resulting from the testwork were in line with forecasted plant consumption for the existing plant.

13.4.5 Additional Sample Characterization

Mercury Analysis

A representative pulverized sample of each composite was submitted for mercury analysis to a detection limit of 0.3 g/t. The results showed that all composites reported a mercury value of <0.3 g/t.

Semi-Quantitative ICP Scan Analysis

A representative 75 µm pulverized sample of each of the 23 composites (~100 g) was submitted for a semi-quantitative ICP scan analysis. No elements raised concern and confirmed compliance with the proposed recovery method and environmental disposal.

Gold Screen Fraction Analysis

Given the high percentage of gold recovered by gravity, four Phase II composites were selected for head gold grade determination by screen fraction analysis. The four fractions chosen and submitted for assay were +10 mesh (+1,700µm), +14 mesh (+1,180 µm), +48 mesh (+300 µm), and -48 mesh (-300 µm). The gold grades determined ranged from 9.4–20.2 g/t.

The gold distribution as well as the mass distribution were approximately 50% between the +14 mesh and -14 mesh fractions, with the exception of one composite. A large proportion of the gold grains were found to be distributed in the coarser size fractions, which has also been evidenced by the occurrence of visible gold in the diamond drill core.

13.4.6 Conclusions

Based on the results of the Zone 58N metallurgical testing and a conceptual plant throughput range of 1,000–2,000 t/d, the existing process plant is capable of processing the Zone 58N mineralization.

13.5 Recovery Model

13.5.1 Recovery Equations

The recovery equation for the LOM is derived from 2019–2020 plant data (Figure 13-7).

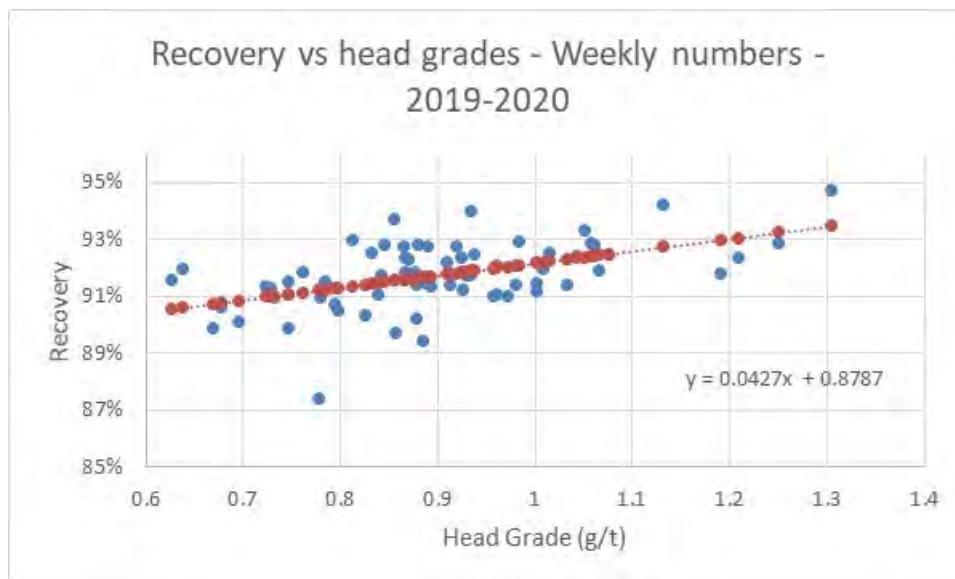
The current recovery equation is:

- Gold Recovery (%) = $(0.8787 + 0.0427 \times \text{HG}) \times 100$ where HG represent the head grade in g/t.

This relationship includes allowances for gold solution losses occurring at the processing facility.



Figure 13-7: Recovery versus Head Grades, 2019–2020



Note: Figure prepared by Kirkland Lake Gold, 2020.

13.5.2 LOM Recovery Forecasts

The LOM recovery of 91.9% will follow the 2019–2020 model with a 0.75% improvement forecast starting in 2022 as a result of the various initiatives to improve the recovery are implemented. Laboratory testwork performed by SGS indicated that the West Detour deposit has a similar mineralogy to that of the Detour Lake deposit with similar recoveries. The same recovery assumptions are therefore used for the West Detour mineralization as for the Main Pit.

For the Zone 58N, a recovery of 98.1% is predicted based on the following gold head grade–gold recovery relationship (Figure 13-8):

- Gold Recovery (%) = $(0.9204 + (0.0221 \times \text{HG}) - (0.002 \times (\text{HG})^2)) \times 100$ where HG represent the head grade in g/t.

This relationship also accounts for gold solution losses occurring at the processing facility.

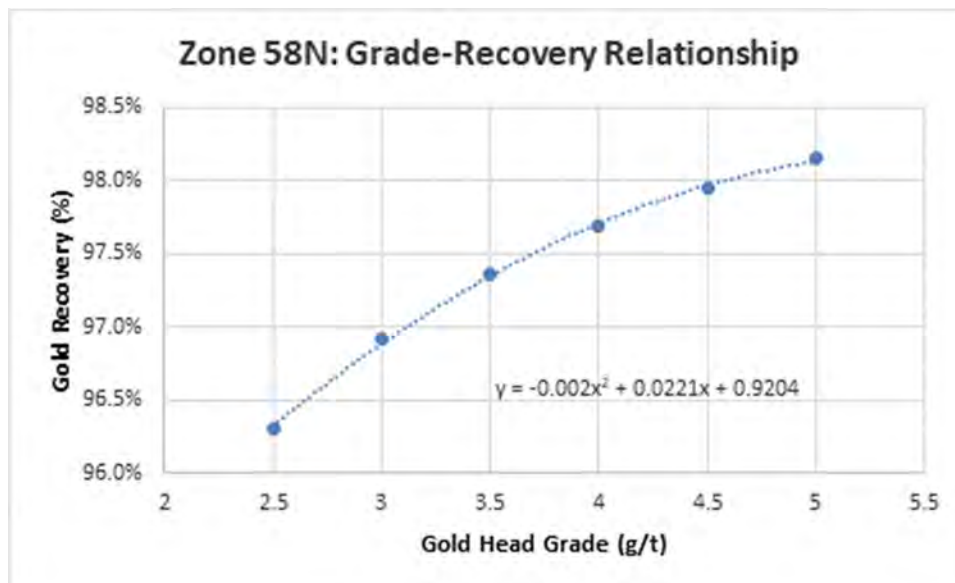
13.5.3 Recovery Improvement Initiatives

The recovery improvement initiatives include:

- Grind size fineness improvement:
 - Ball size optimization;
 - Process control improvements;
 - Increase ball-mill power;
 - Reduced hardness from Detour West;



Figure 13-8: Grade–Recovery Relationship, Zone 58N



Note: Figure prepared by Kirkland Lake Gold, 2020.

- CIP solution losses reduction:
 - Elution circuit optimization;
 - Improved carbon management;
- Gravity recovery improvement:
 - Leach reactor cycle improvement;
 - Conversion of gravity circuit feed from cyclone feed to cyclone underflow;
- Carbon losses minimization:
 - CIP feed screen to avoid rocks being mixed with carbon;
 - New loaded carbon pump;
 - Better carbon screening;
- Improve leach extraction:
 - Addition of four more leach tanks;
 - Improved understanding to lead nitrate and cyanide dosage with talc ores using electrochemistry probe.

13.6 Metallurgical Variability

The variability of the ore in the Main Detour Pit is related to the talc, copper and sulphur content. The talc zone is mainly located on the south end of the Main Pit while copper and sulphur are present throughout the pit in various quantities. High-talc ore are soft and will process faster. High-talc ore used to impact recovery in the past and talc ores were limited

to 15% of plant feed. It was found that recovery could be maintained with very high lead nitrate dosage rates. Processing of 40% talc ore in feed in 2020 yielded similar recoveries as non-talc ore.

Sulphur content also impacts recovery, and blending strategies to avoid feeding the plant with ores over 2% sulphur are in place and have worked successfully.

13.7 Deleterious Elements

Copper is an element that impact cyanide and SO_2 consumption. It is managed by blending if too high and controlling slurry temperature to leach feed. To avoid the copper plating on the carbon, a control strategy on the cyanide/copper ratio is in place.

14.0 Mineral Resource Estimates

14.1 Introduction

Mineral Resources are estimated for the Detour Lake, West Detour, North Pit and Zone 58N areas. There are two separate geological models for the West Detour deposit. The outlines of the estimated areas that support the Mineral Reserve statement are shown in Figure 14-1 for Detour Lake, West Detour, and North Pit. Figure 14-2 shows the outlines the estimated areas that support the Mineral Resource statement, and includes Detour Lake, West Detour with updated model limits, and North Pit. Zone 58N is covered by a stand-alone model.

The models supporting the Mineral Reserves have the following cut-off dates:

- The database cut-off date for the drilling supporting the Detour Lake estimate is 24 April, 2020 and West Detour estimate is 7 June, 2013;
- The database cut-off date for the drilling supporting the North Pit estimate is 24 November, 2016.

The models supporting the Mineral Resources have the following cut-off dates:

- The database cut-off date for the drilling supporting the Detour Lake estimate is 24 April, 2020;
- The database cut-off date for the drilling supporting the West Detour estimate with updated model limits is 26 July, 2021;
- The database cut-off date for the drilling supporting the North Pit estimate is 24 November, 2016;
- The database cut-off date for the drilling supporting the Zone 58N estimate is September 3, 2018.

14.2 Models Supporting the Mineral Reserve Estimates

The models that support the Mineral Reserve estimates have a boundary between the West Detour and Detour Lake models at section line 16,995 E.

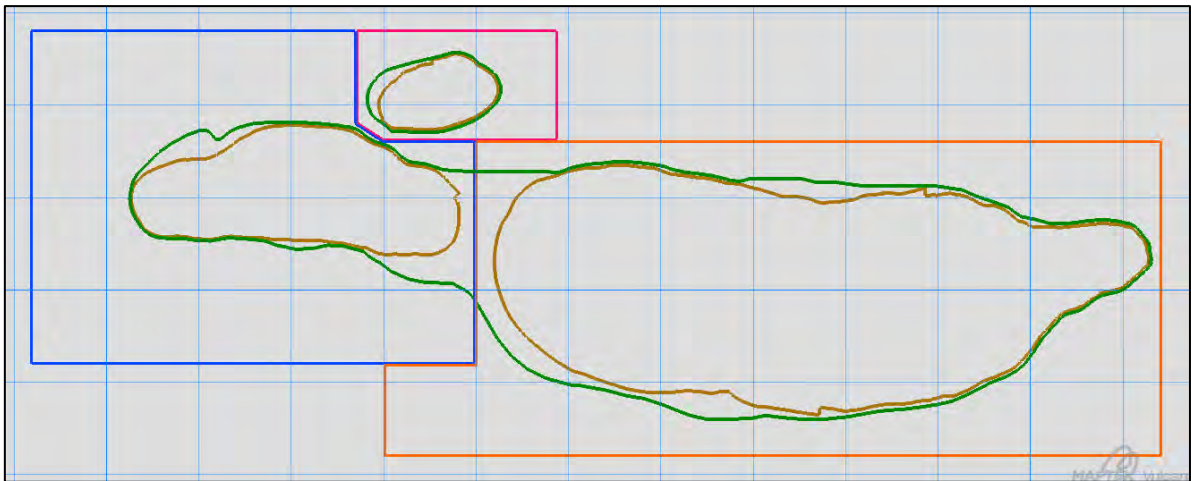
14.2.1 Geological Interpretation

The geological model for Detour Lake consists of 3D wireframes built by Kirkland Lake Gold in 2020.

The model that supports the Mineral Reserves consists of 3D wireframes built in 2013 by Detour Gold and Thon Consulting.

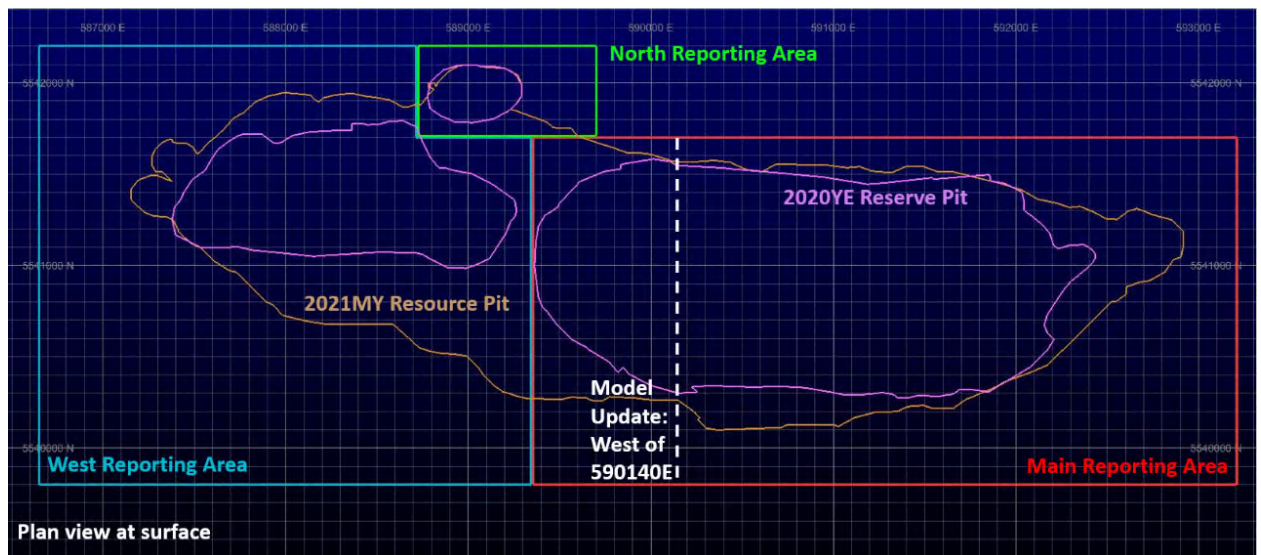


Figure 14-1: Reporting Limits for Detour Lake, West Detour and North Pit Areas (Mineral Reserves)



Note: Figure prepared by Detour Gold, 2018. Map north is to the top of the plan.

Figure 14-2: Reporting Limits for Detour Lake, West Detour and North Pit Areas (Mineral Resources)



Note: Figure prepared by Detour Gold, 2021. Map north is to the top of the plan. MY = mid year, YE = year end.

The geological model for the North Pit is based on interpreted mineralized zone (domain) established using an indicator kriging (IK) interpolation of gold grades using at an indicator cut-off grade of 0.2 g/t Au and a 0.4 cut-off probability to be above the grade cut-off built by P. Daigle Consulting Services in 2016. The geological model for 58N consists of 3D wireframes built in 2018 by G Mining Services Inc. Three main broad mineralized domains containing most of the mineralization at the Detour Lake deposit were defined, with a fourth zone containing all data that were not part of the three mineralized domains:

- Mineralized domain 1 (MZ1) is spatially associated with the chert marker horizon;
- Mineralized domain 2 (MZ2) is associated with the historic Quartz Hangingwall mineralized zone;
- Mineralized domain 3 (MZ3) is the broadest of zones and encompasses widespread disseminated mineralization to the north of mineral domain 2;
- Mineralized domain 4 (MZ 4) encompasses the areas outside of MZ1, MZ2 and MZ3.

For overlapping purposes, the domains were extended into the West Detour area for the Mineral Reserves model. Domains are shown in Figure 14-3 for the Detour Lake model.

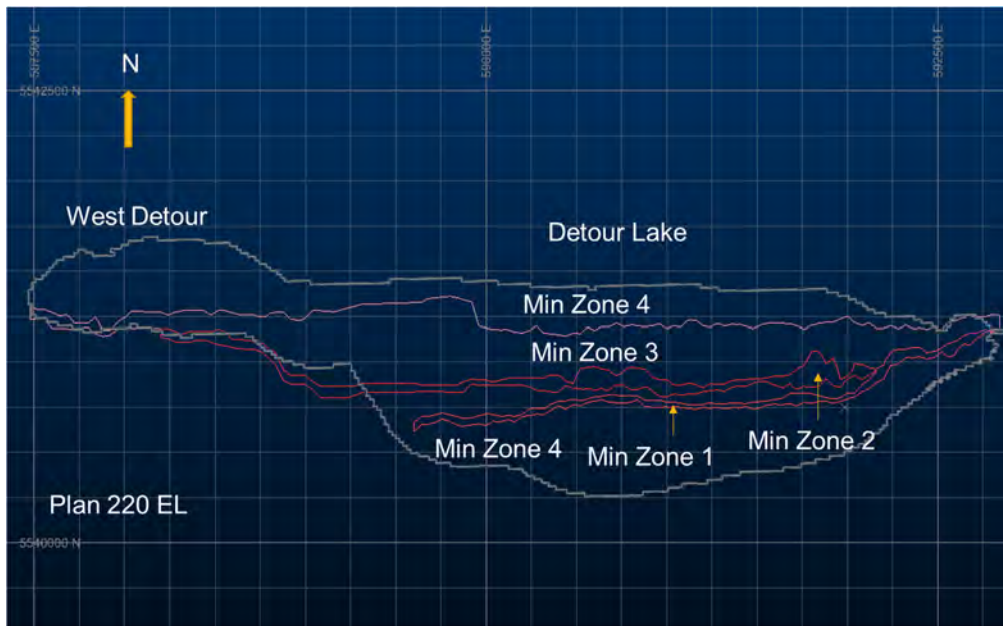
For West Detour, mineralized domains were defined by interpreting limits of mineralization on sections that correspond to broad mineralized zones with higher than usual concentration of samples with potentially economic gold grades. Domain 1 corresponds to the chert marker horizon geological unit which crosses most of the Detour Lake deposit from east to west with a well-defined flexure on the east side. All the other mineralized domains were built around Domain 1 and share the same east–west trend with a typically sub-vertical dip. The grade envelope used for West Detour is shown in Figure 14-4.

The geological model for the North Pit was created using drill hole lithology interpretations, on section, aided by ICP geochemistry. A gold grade envelope was established using indicator kriging (IK), based on an indicator cut-off grade of 0.20 g/t Au. A wireframe was created based on the indicator probability. Three main volcanic rock units were modeled: a hanging wall iron-rich tholeiite, a central calc-alkaline komatiite, and a footwall magnesium-rich tholeiite (Figure 14-5). However, gold mineralization does not seem to be constrained by these units and appears to follow the general lithology orientation.

Nine principal sub-vertical mineralized conduits were identified in Zone 58N, based on alteration intensities described as moderate or stronger, plus an additional zone of mineralization present in the hanging wall (Zone 75). The mineralized domains show a strong sub-vertical continuity and limited strike extent to the east and west. Within the two largest domains (1 and 7), high-grade sub-parallel shoots were interpreted to plunge shallowly to the east. The domains are shown in Figure 14-6.

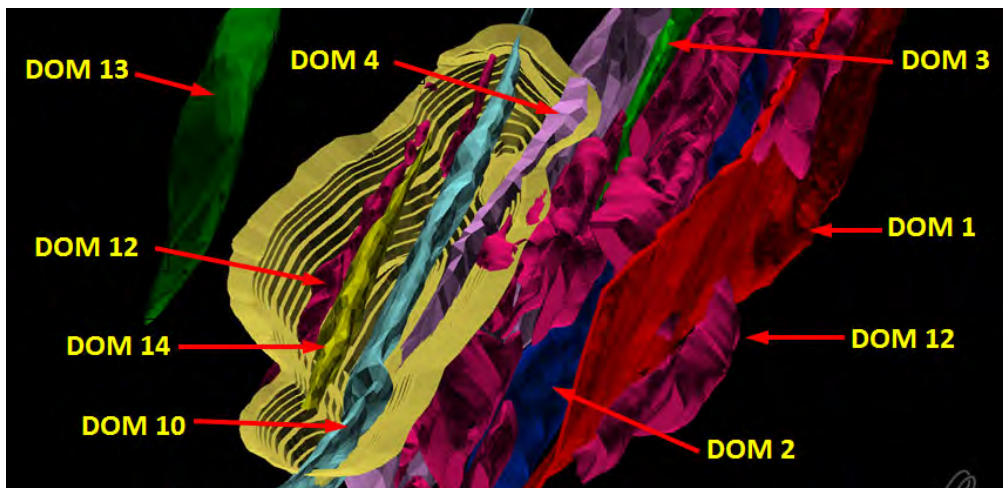


Figure 14-3: Detour Lake Plan View of the Open Pit Showing Mineralized Zones



Note: Figure prepared by Kirkland Lake Gold, 2021.

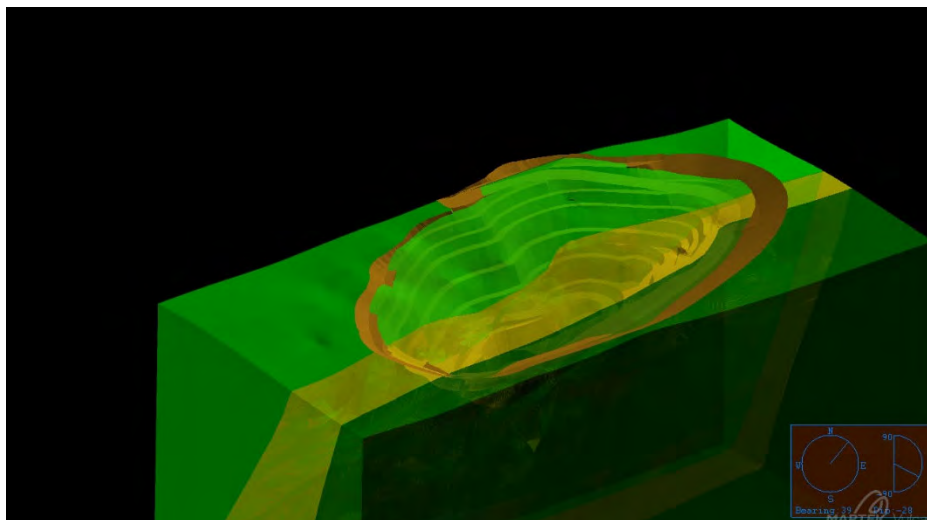
Figure 14-4: West Detour Isometric View of the Open Pit Showing Mineralized Domains (looking east-northeast)



Note: Figure prepared by Detour Gold, 2018.

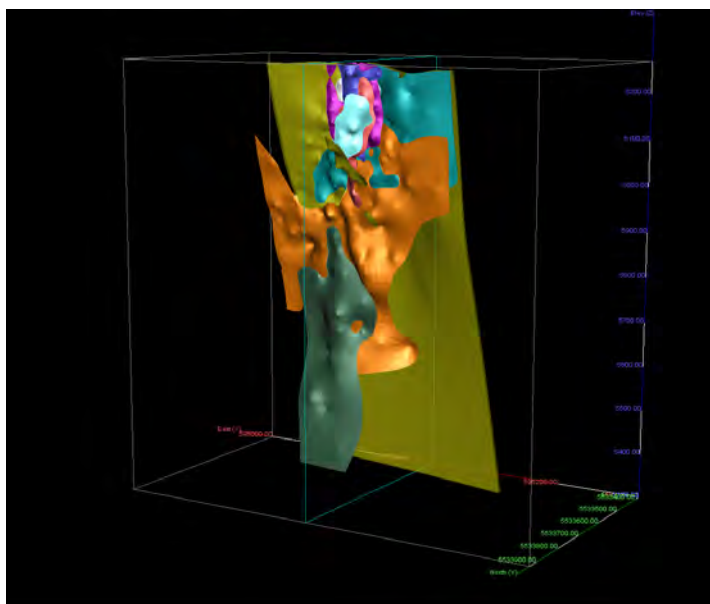


Figure 14-5: Isometric View of the North Pit (looking northeast)



Note: Figure prepared by Detour Gold, 2018.

Figure 14-6: Zone 58N Deposit Isometric View of the Mineralized Domains (looking southeast)



Note: Figure prepared by Detour Gold, 2018.

14.2.2 Underground Void and Stope Interpretation

A 3D model of all prior mined areas in the Detour Lake area was created from available plans and sections. Individual models were created for underground access, stopes, and the Campbell open pit. Volume reconciliation versus prior mining records showed that the majority of underground openings are accounted for. This model was used to deplete the block model.

14.2.3 Grade Capping

Reconciliation Study

A high-level review of available reconciliation data was undertaken by third-party consultants, Wood plc (Wood) to determine appropriate grade capping thresholds for the various mineralized zones or domains (MZs). The study area was established as the latest four years of mining from January 2016 through December 2019 (four year or 4Y area) where the data and grade control procedures were best understood. This was performed by selecting only those model block centroids that lie below the end of year wireframe surface EOY_31Dec2015 and above the end of year wireframe surface EOY_31Dec2019 (Figure 14-7).

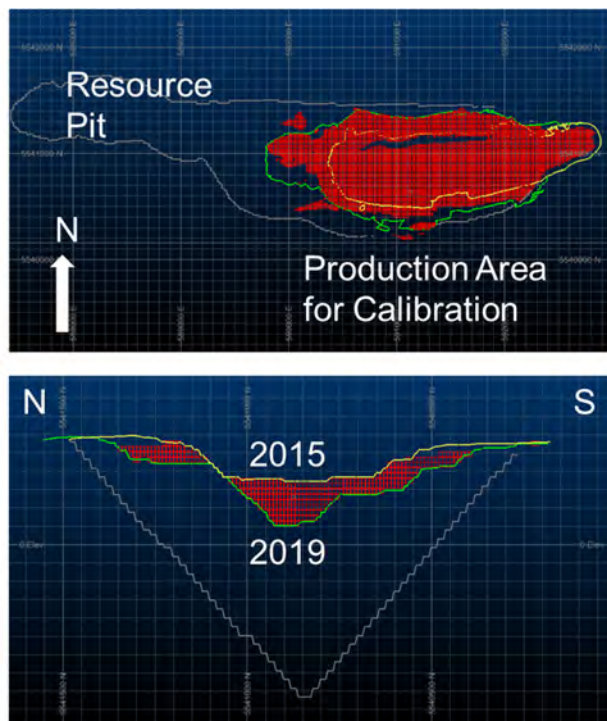
Kirkland Lake Gold constructed a preliminary model to evaluate the performance of the Mineral Resource block model. The model was reconciled to mining production. The reconciliation study focused on the reconciliation between the in-situ grade control and the 4Y test resource model (F1 reconciliation).

Different 4Y test models used MZ1, MZ2, MZ3, a high-grade zone (10 m buffer around previously-stopped areas) mineral domain 4, and preliminary data (Figure 14-8). Grade was interpolated into 10 x 10 x 7.25 m blocks using an inverse distance weighting to the power of three (ID3) interpolation method. Fields for various capping limits (25, 35, 50, 65, 75, 100, 125, 300 g/t Au) were created. The high-grade zone established for production reconciliation was not used as an estimation domain. Drill holes within the domain were, however, capped to the determined threshold and later used for grade interpolation purposes.

The models were compared to the back-calculated in-situ grade control tonnages and gold grades. To match the in-situ grade control tonnes, gold grade and ounces adjustments were made to the model estimation parameters including capping thresholds by MZ. The minimum and maximum number of composites to estimate a block were tailored for each mineral zone. The maximum and minimum number of samples was later adjusted to match a selective mining unit (SMU) change of support calibration.

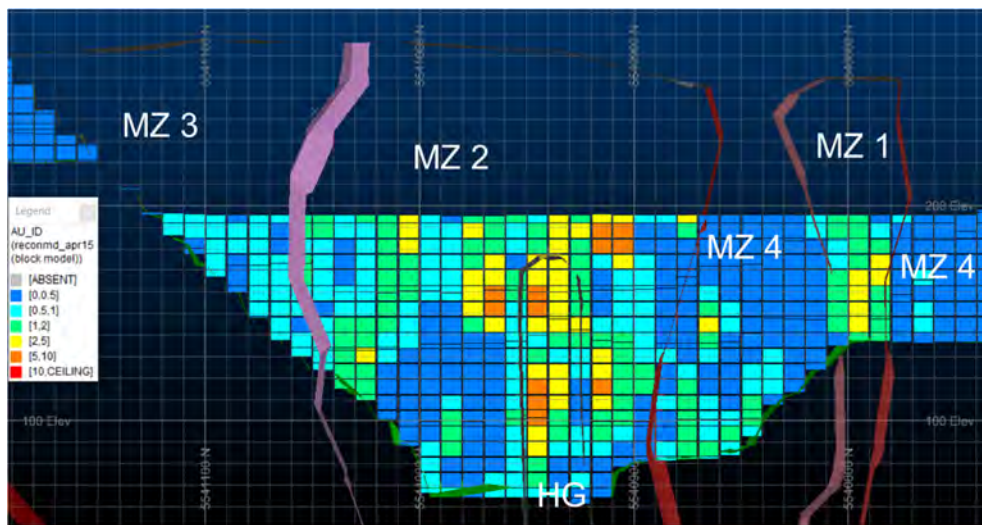


Figure 14-7: Plan and Section of 4Y Production Reconciliation Area



Note: Figure prepared by Wood, 2020.

Figure 14-8: Domains Used to Establish Capping Thresholds, Detour Lake



Note: Figure prepared by Wood, 2020

A comparison between the mill data, adjusted in-situ grade control, 15 April 4Y test model, and relative difference between the adjusted in-situ grade control and 4Y test was completed. The adjusted in-situ grade control and 4Y test model compared well. The production reconciliation exercise resulted in establishing the most effective capping thresholds. Table 14-1 lists the thresholds established and used for Detour Lake grade interpolation for the various MZs.

Grade Capping

Probability plots were used to assess if, and where, grade caps should be used to restrict the influence of high-grade samples for West Detour, North Pit and Zone 58N. To accurately compare anomalous high-grade gold assay values that had differing sample lengths, the grade distribution multiplied by the sample interval length was evaluated. Grades were capped prior to compositing at West Detour, and Zone 58N. Composites at North Pit are the same length, and therefore grade capping was imposed following compositing.

Grade caps are summarized in Table 14-2 for West Detour, in Table 14-3 for the North Pit and in Table 14-4 for Zone 58N.

14.2.4 Compositing

For Detour Lake, samples for grade estimation were first composited to 1 m, separated by mineral zones, capped, and then composited into 5 m down-hole intervals. The 5 m composite length approximates one-half of the 7.25 m vertical height of a block in the block model considering the average inclination of surface drill holes (approximately 50°),

Composites for the West Detour deposit were created on 5 m capped grade down-hole intervals. This composite size was selected to match the 5 m north-south-oriented thicknesses of the 10 x 5 x 12-m resource blocks to be interpolated. The intent of selecting composites with length similar to the mineralized block intercepts was to ensure that grade dilution originating from the block size would be included in the grade of samples used for interpolation.

Compositing for both the Detour Lake and West Detour deposits was done starting from the overburden-bedrock contact.

Composites for Detour Lake Mine forced all samples to be included in one of the composites by adjusting the composite length, while keeping it as close as possible to the composite interval or length. A default grade of 0.01 g/t Au was applied to all absent assay values within the historical drill holes, prior to compositing. A default grade of 0.001 g/t Au was applied to all absent assay values within the post-2004 drill holes, prior to compositing.

Table 14-1: Capping Thresholds, Detour Lake

Zone	Cap (g/t Au)
MZ1	50
MZ2	65
MZ3	35
MZ4	35
HG	100

Table 14-2: West Detour Deposit Capping Limits for GTs of Original Sample Data

Domain	No. GT	Avg. GT (m.g/t)	Capping (m.g/t)	Cap1				Cap2			
				No. Capped	% Capped	Avg. GT (m.g/t)	% GT Lost	No. Capped	% Capped	Avg. GT Lost	% GT Lost
1	1,830	0.46	50	NA	NA	0.46	NA	NA	NA	NA	NA
2	14,672	0.94	30	47	0.32	0.87	7.6	NA	NA	NA	NA
3	17,436	0.62	25	35	0.20	0.58	7.3	NA	NA	NA	NA
4	43,184	0.53	25	56	0.13	0.46	13.9	NA	NA	NA	NA
8	3,379	0.67	30	6	0.18	0.62	7.4	NA	NA	NA	NA
10	22,003	0.79	75	18	0.08	0.71	9.1	NA	NA	NA	NA
13	5,248	0.52	15	22	0.42	0.48	7.0	NA	NA	NA	NA
14	8,345	0.68	40	9	0.11	0.59	13.0	NA	NA	NA	NA
<i>Subtotal</i>	<i>116,097</i>	<i>0.66</i>	<i>NA</i>	<i>193</i>	<i>0.17</i>	<i>0.59</i>	<i>10.1</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
Outside (0)	25,086	0.20	15	203	0.17	0.17	17.1	NA	NA	NA	NA
9	207,285	0.19	15/30	11	0.10	0.17	10.5	71	0.03	0.18	6.0
Total	348,468	0.35	NA	439	0.13	0.31	10.5	307	0.09	0.32	9.0

Note: NA = not applicable. GT = grade distribution multiplied by the sample interval length.

Table 14-3: North Pit Deposit Descriptive Statistics for Uncapped and Capped 3 m Composite Gold Values

Statistics	Uncapped (g/t Au)	Capped (g/t Au)	Length (m)
Count	8,014	8,014	8,014
Min	0.001	0.001	0.07
Max	28.903	11.407	3.00
Mean	0.256	0.249	2.94
Standard deviation	0.879	0.732	0.32
CV	3.430	2.940	0.11

Note: CV = co-efficient of variation.

Table 14-4: Zone 58N Grade Capping by Mineralized Domain

Domain	No. Assays	Metal Content	Capping (g/t Au)	No. Capped	% Assays Capped	Metal Content Capped	% Metal Removed
1	2,682	6,856	100	9	0.33	6,069	11
2	639	1,890	50	6	0.93	1,405	26
3	832	2,191	50	5	0.60	1,968	10
4	417	956	30	5	1.20	703	26
5	339	787	20	6	1.77	504	36
6	146	311	20	3	2.05	258	17
7	1,777	5,405	120	6	0.33	5,080	6
8	510	661	20	6	1.18	548	17
9	116	647	20	3	7.76	209	68
75	1,785	3,259	60	8	0.17	2,398	26
<i>Subtotal</i>	<i>9,243</i>	<i>22,961</i>		<i>57</i>	<i>0.62</i>	<i>19,143</i>	<i>17</i>
0	83,664	8,369	50	10	0.01	8,038	4

Note: Metal content = gold assay x assay interval length.

Only composites of at least half the nominal composite length (i.e., 2.5 m) were used for Detour West. A default grade of 0.01 g/t Au was applied to all missing assay values within the historical drill holes (referred to as 'padding'), prior to compositing.

The North pit dataset was composited on 3 m down-hole intervals. Composites were started at the top of hole and all composites were used in resource estimation. Missing assays were replaced by 0.00 g/t Au prior to compositing. A new attribute was created in the composite table for coding the indicator. A code of '1' was assigned to all composite grades ≥ 0.20 g/t Au and a code of '0' was assigned to all composite grades < 0.20 g/t Au.

A composite length of 2 m was selected for Zone 58N, which resulted in a minimum of two composites per drill hole (applying a 4 m minimum downhole thickness rule) per domain.

14.2.5 Variography

A review of the lithology, structural, alteration, and assay trends at the Detour Lake Mine concluded that the trend of the gold mineralization is relatively consistent, following a strike of 80° with a $60\text{--}80^\circ$ dip to the north, and no obvious differences in trends were noted between the different mineral zones. Local variations within the overall trend were accounted for using dynamic anisotropy during the grade estimations which aligns the search ellipse with the structural trends for every block in the model.

Variograms (relative pairwise and correlograms) were calculated and modelled for each MZ using a generalized trend of 90° and a vertical dip for the three primary directions. Since

the variograms were constructed before the capping thresholds were established, the composites used for variography were capped at 50 g/t Au.

The nugget effect values for each variogram were first established using down-hole variograms and then directional variograms were modeled. Variograms for MZ4 were inconclusive and as a result, the variogram parameters from MZ3 were used for MZ4. An example of modeled gold variograms in three primary directions for MZ1 are shown in Figure 14-9 and variogram parameters for all MZs are summarized in Table 14-5. The thick disseminated zones of mineralization explain the relatively similar variogram ranges in these directions.

Spatial continuity of the grade of composites in each domain at West Detour was assessed through correlograms (the calculated correlation coefficient of grades from pairs of composites separated by a given distance in a given direction). Directions investigated were the east–west horizontal average strike, the vertical average dip, the horizontal north–south direction across average strike and dip, as well as two intermediate directions in east–west-trending vertical planes (i.e., a dip of 45° to west and a dip of 45° to east). In each case, the average downhole correlogram (along drill holes) was calculated to better assess the magnitude of the nugget effect.

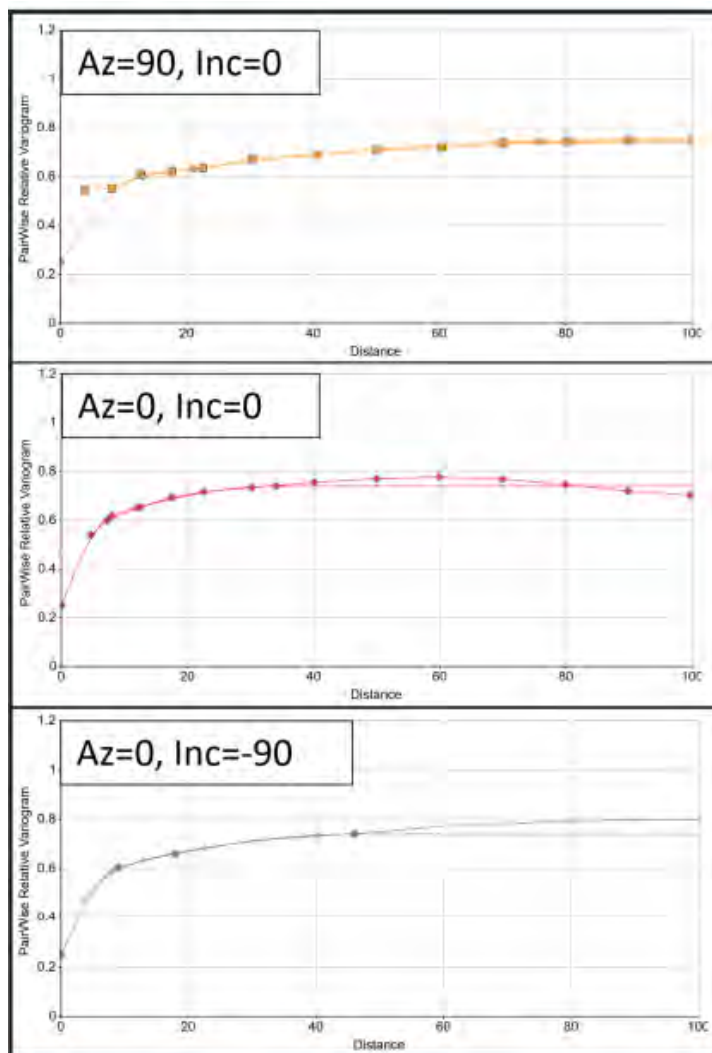
Results of variogram models for West Detour showed that for most domains the spatial continuity of the grade of composites was characterized by:

- A significant relative nugget effect of 50% to 70%;
- A generally well-defined anisotropy with best continuity (lowest curve) along the average east–west horizontal strike (dip to west);
- Poorest continuity (highest curve) across dip and strike;
- Intermediate continuity along the average vertical dip (dip to east).

Variography on gold grades for the North Pit deposit was completed on the 3 m point composite capped gold grades. Variography was carried out using Sage2001 software on the 0.20 g/t Au indicator values. Domain 40 and Domain 9 were determined separately. The variography for Domain 40 resulted in relatively smooth variograms, although with a very high nugget value. For Domain 9, the variograms did not produce very robust variography. Variogram ranges were kept for Domain 9 but the orientations from Domain 40 were honoured. The variograms for Domain 40 were used in determining search neighbourhood for gold grade interpolation.



Figure 14-9: Pairwise Variogram



Note: Figure prepared by Wood, 2020.

Table 14-5: Variogram Parameters, Detour Lake Mine

Azimuth/ Inclination	Domain VG Type	Rotation Z/X/Z	Axis	Nugget	Structure C1/C2/C3	Range a1/a2/a3
90/0	Au	0/0/0	X	0.25	0.29/0.02/0.18	13/21/76
0/0	MZ1		Y			8/12/34
0/-90	PW Relative		Z			9/18/46
90/0	Au	0/0/0	X	0.35	0.28/0.1/0.14	10/21/98
0/0	MZ2		Y			7/20/47
0/-90	PW Relative		Z			7/14/77
90/0	Au	0/0/0	X	0.25	0.38/0.17/0.09	8/22/100
0/0	MZ3		Y			10/18/47
0/-90	PW Relative		Z			7/17/60
90/0	Au	0/0/0	X	0.25	0.38/0.17/0.09	8/22/100
0/0	MZ4		Y			10/18/47
0/-90	PW Relative		Z			7/17/60

Conventional variographic analysis was attempted on the 2 m composites from Zone 58N for the grouped mineralized domains but it was not possible to extract variogram models as the experimental variograms were too erratic. Composites within a 50 ppb Au grade shell were selected and used to generate indicator variograms at various thresholds to identify directions of anisotropy. The range of the indicator variogram models was reduced to the drill spacing (25 x 25 m) above an indicator threshold of 1.0 g/t Au. The orientation of the major axis is an 85° plunge (downwards) towards 10° azimuth, highlighting the vertical continuity of the deposit.

14.2.6 Block Models

Drill hole spacing across the Detour Lake deposit is generally on the order of 40 m in the north–south and east–west directions. A block size of 10 x 10 x 7.5 m was selected to accommodate the drill hole spacing and width of the mineralization. The 10-m east–west and 10 m north–south dimensions corresponded to approximately half the minimum spacing between surface drill holes. The 7.5 m vertical dimension took equipment size into consideration and also represents half of the bench height used in the open pit. The percentage of every block that was affected by prior mining activity was recorded from the 3D old workings model.

Drill hole spacing across the West Detour deposit is generally on the order of 40 m in the north–south and east–west directions. A block size of 10 x 5 x 6 m was selected to accommodate the drill hole spacing and width of the mineralization. The 10-m east–west dimension corresponded to approximately half the minimum spacing between surface drill holes. The 5-m north–south dimension was selected to account for the perceived greater variability in grade along that direction. The West Detour deposit has narrower mineralized



zones and the model was built at 6 m heights, offering the possibility of regularizing (combining) two blocks into a 12-m bench, or selecting 6-m benches. Mineral Resource reporting is done on the combined 12-m block size. There is an exploration ramp between elevation 5,630 and 5,510 metres EL. The ramp connects to the prior underground operation at the Detour Lake Mine. A total of 119 blocks fall inside the ramp volume and were taken out of the resource block model.

For reporting purposes all blocks east of section 16,995E were considered to be part of the Detour Lake area, while blocks west of 16,995E were considered to be part of the West Detour area.

Subsequent to the 2016 infill drilling of the North Pit deposit, a decision to separate it from the West Detour dataset was taken to allow for smaller block sizes and a different modeling methodology to better address the narrow mineralization and smaller mining equipment to be used. The North pit deposit model is contained between sections 15,800E and 17,500E, north of 20,800N. The block model for the North Pit was created to overlap the northern portion of West Detour deposit in order to capture the mineralized trend. The block model matrix is the same for both the IK model and the gold grade model.

Together, the three models cover the open pit designs in their entirety.

The Zone 58N model was created to encompass all the known mineralization drilled at Zone 58N, and block sizes were decided based on a typical underground mining scenario (3 m minimum width). Due to the often narrow nature of mineralization, a percentage block model was adopted in Geovia GEMS, and subsequently converted to a sub-blocked model for mine planning purposes.

14.2.7 Density

A total of 7,045 samples that have been collected for density from core holes from various lithologies across the area of mineralization. Most of these samples are 1 m in length.

At Detour Lake, average length weighted densities were determined for these different lithologies. The average density for each lithology was then assigned to the global drillhole database. Intervals without a density value were assigned a value based on a similar lithology and indeterminate intervals were assigned an average density of 2.99 t/m³.

A density of 2.9 t/m³ in rock and 1.8 t/m³ in overburden and backfill was used for tonnage determination in the West Detour and North Pit models.

The Zone 58N deposit used a density of 2.7 t/m³.

14.2.8 Grade Interpolation

To attempt to honour the distribution of local mineralization trends, a dynamic anisotropy process was implemented for the Detour Lake estimate. The dynamic anisotropy model was constructed as follows:



- Mineral zones and some lithology wireframes were used as a framework to represent the trends of the mineralization;
- The hanging wall and footwall surfaces of several domains were used and only one surface was used for domains sharing a common footwall or hanging wall surface. The lithology wireframes of the hanging wall of the north talc horizon, the major contact between massive and pillowed units, and the southern talc footwall and hanging wall were used for dynamic anisotropy. Table 14-6 lists the surfaces used;
- Surfaces with irregularities/jogs were smoothed using up to two smoothing passes (Table 14-7);
- Dynamic anisotropy angles were interpolated using ID3.

The interpolation of the Detour Lake resource model was completed using ordinary kriging (OK). An inverse distance weighting to the second power (ID2) interpolation, an ID3, and nearest neighbour (NN) estimates were completed concurrent to the OK estimate for validation purposes.

Search file parameters related to the number of samples used to estimate a block were determined based on the 4Y reconciliation studies and an in-situ selectivity/dilution study completed by Wood. Search parameters for the all encompassing mineral zone were set to the same as those used for MZ3.

Search parameters were based on distances used for drill spacing supporting classification of Measured Mineral Resources (20 x 20 m). The second search distance was 30 x 30 m followed by a third 60 x 60 m search. Search orientations varied on a block by block basis using Datamine's dynamic anisotropy process.

The minimum and maximum number of samples were selected based on an in-situ selectivity/dilution study. A maximum of 3–7 samples from a single drill hole were used to ensure that at least two drill holes were used for any estimate.

Density was estimated using an ID3 method and used the gold search parameters.

Estimation parameters for the Detour Lake deposit are listed in Table 14-8.

The interpolation of the West Detour deposit resource model was completed using OK. Multiple dip and dip directions were used per domain. A "panel" approach was used to set local orientation. The panels were limited by ranges of easting and elevation. A four pass estimation was used, with the same intent as described for Detour Lake. The majority of the blocks were interpolated in the first pass with more constrained search conditions with the exception of Domain 9, which represented the background of the model. Estimation parameters for the West Detour deposit are listed in Table 14-9.

The North Pit deposit block model was estimated using OK interpolation method on 3 m capped composite gold grades. ID2 and NN interpolations were also estimated for validation purposes.



Table 14-6: Dynamic Anisotropy Surfaces, Detour Lake

Surface	Type (Min/Litho)	Hangingwall	Footwall	Smoothed
HW min zone 1	Min	Y	N	Y
HW min zone 6	Min	Y	N	Y
Min zone 10	Min	Y	Y	Y
North pit north	Min	Y	Y	Y
North pit south	Min	Y	Y	Y
Talc north	Litho	Y	N	Y
Talc south	Litho	Y	Y	Y
Pillowed/massive flow contact	Litho	N	Y	Y

Table 14-7: Dynamic Anisotropy Search Parameters, Detour Lake

Search 1		Search 2		Search 3		Maxkey ¹
Distance	Min/Max	Distance	Min/Max	Distance	Min/Max	
140	6/12	210	6/12	420	3/6	3
70		105		210		
140		210		420		

Note: 1 = maximum number of samples from one drill hole

Table 14-8: Detour Lake Block Model Estimation Parameters

Element/Domain	Search 1		Search 2		Search 3		Maxkey ¹
	Distance	Min/Max	Distance	Min/Max	Distance	Min/Max	
Au MZ1	30	8/24	45	8/24	90	8/24	7
	30		45		90		
	15		22.5		45		
Au MZ2	30	4/12	45	4/12	90	4/12	3
	30		45		90		
	15		22.5		45		
Au MZ3	30	6/20	45	6/20	90	6/20	5
	30		45		90		
	15		22.5		45		
Au MZ4	30	6/20	45	6/20	90	6/20	5
	30		45		90		
	15		22.5		45		



Table 14-9: West Detour Block Model Estimation Parameters

Domain	Panel	Pass	Rmax (m)	Rint (m)	Rmin (m)	Az (°)	Dip (°)	Spin (°)	Min. Comp.	Max Comp/Hole	Max Comp.
1	NA	1	50	30	15	297	-42	65	5	3	15
		2	100	60	30						20
		3	150	90	45						25
		4	200	120	60						30
2	1	1	50	20	10	278	-10	-77	5	3	20
		2	100	40	20						25
		3	150	60	30						30
		4	200	80	40						35
2	2	1	50	20	10	285	-9	62	5	3	20
		2	100	40	20						25
		3	150	60	30						30
		4	200	80	40						35
3	1	1	50	30	10	283	-20	81	5	3	20
		2	100	60	20						25
		3	150	90	30						30
		4	200	120	40						35
3	2	1	50	30	10	276	-20	-79	5	3	20
		2	100	60	20						25
		3	150	90	30						30
		4	200	120	40						35
3	3	1	50	30	10	285	-19	74	5	3	20
		2	100	60	20						25
		3	150	90	30						30
		4	200	120	40						35
3	4	1	50	30	10	294	-13	41	5	3	20
		2	100	60	20						25
		3	150	90	30						30
		4	200	120	40						35
4	1 and 2	1	50	25	15	280	0	80	5	3	20
		2	100	50	30						25
		3	150	75	45						30
		4	200	100	60						35
4	3	1	50	25	15	280	0	-84	5	3	20
		2	100	50	30						25
		3	150	75	45						30
		4	200	100	60						35



Domain	Panel	Pass	Rmax (m)	Rint (m)	Rmin (m)	Az (°)	Dip (°)	Spin (°)	Min. Comp.	Max Comp/Hole	Max Comp.
9	NA	1	50	30	15	270	-10	68	5	3	20
		2	100	60	30						25
		3	150	90	45						30
		4	200	120	60						35
10	NA	1	50	20	10	281	-18	67	5	3	20
		2	100	40	20						25
		3	150	60	30						30
		4	200	80	40						35
13	NA	1	50	25	10	273	-18	67	5	3	20
		2	100	50	20						25
		3	150	75	30						30
		4	200	100	40						35
14	NA	1	50	20	10	281	-33	66	5	3	20
		2	100	40	20						25
		3	150	60	30						30
		4	200	80	40						35

Note: RMAX, RINT, RMIN = long, intermediate and short radii of ellipsoid. Az = azimuth (positive from north) of direction with long radius. Dip = dip (negative from horizontal down) of the direction of the long radius. Spin = third rotation angle around the direction of the longest range (Az/Dip) to put the direction of the short range into place. Min. Comp. = minimum number of composites retained in search ellipsoid for kriging of block to proceed. Max. Comp./Hole = maximum composites retained in the same hole. Max. Comp. = maximum number of composites retained in ellipsoid.

The gold estimation block model was interpolated using two passes. The first pass used a minimum of three points and a maximum of 10 point composites to estimate a block with a maximum of two points per drill hole. The second pass used a minimum of two points and a maximum of 10 point composites with a maximum of two points per drill hole. The passes were run in reverse order to avoid re-estimation of zero grades.

The search ellipse parameters for pass 1 and pass 2 are provided in Table 14-10.

Due to the highly erratic distribution of gold grades at Zone 58N, a five-pass interpolation strategy was adopted:

- Pass 1: NN pass within a search ellipse of 10 x 5 x 5 m;
- Pass 2: inverse distance weighting to the third power (ID3) within a search ellipse of 40 (X) x 30 (Y) x 15 m (Z), with a minimum of seven composites and a maximum of 12 composites;
- Pass 3: ID3 within a search ellipse of 60 (X) x 50 (Y) x 25 m (Z), with a minimum of four composites and a maximum of 12 composites;

Table 14-10: North Pit Search Ellipse Parameters for Gold Grade Estimation for Domain 40 and Domain 9

	Azimuth (°)	Dip (°)	Azimuth (°)	Range X (m)	Range Y (m)	Range Z (m)	Variogram Type
Pass 1	78.817	6.578	209.712	62.000	30.807	10.826	Ellipsoidal
Pass 2	78.817	6.578	209.712	90.000	45.000	15.000	Ellipsoidal

- Pass 4: ID3 within a search ellipse of 80 (X) x 70 (Y) x 45 m (Z), with a minimum of two composites and a maximum of 12 composites;
- Pass 5: ID3 within a search ellipse of 120 (X) x 100 (Y) x 60 m (Z), with a minimum of one composite and a maximum of 12 composites.

Search ellipses were orientated according to the dip and dip direction of each individual mineralized domain. High-grade restrictions (Table 14-11) were used to limit the influence of high-grade composites within the search ellipse during interpolation.

14.2.9 Model Validation

Global bias checks were done for each mineral zone in the Detour Lake block model, whereby average gold grades from the OK, ID and NN models were compared. The NN model is a theoretically unbiased global average estimate and provides a basis from which to check the performance of the OK model when no cut-off is applied. The global mean gold grade for the NN and OK models are within 5%. Estimates for all mineral domains compare well and the estimate is considered acceptable. West–east and south–north oriented swath plots demonstrated good agreement between all models. Visual checks were also completed to examine the distribution of grade through the model. These checks demonstrated that interpolated block model grades respect the grades in the composited drill holes (Figure 14-10 and Figure 14-11).

No information is available to Kirkland Lake Gold as to the model validation checks undertaken by SGS on the West Detour model in 2013.

The North Pit block model was validated visually along sections to ensure grades correlated with the composite data set. No apparent bias was observed between block grades and supporting composite grades. Another validation was made of the mean interpolated grades for each domain compared to the mean of the composite grades. There appears to be no bias in the OK or ID2 interpolated grades. Swath plots demonstrate that interpolated grades compare well with the composite values in following the increases and decreases of the composite values. As expected, where there is a low sample density (low sample support), the interpolated values show noted differences between the composite values and interpolated values.

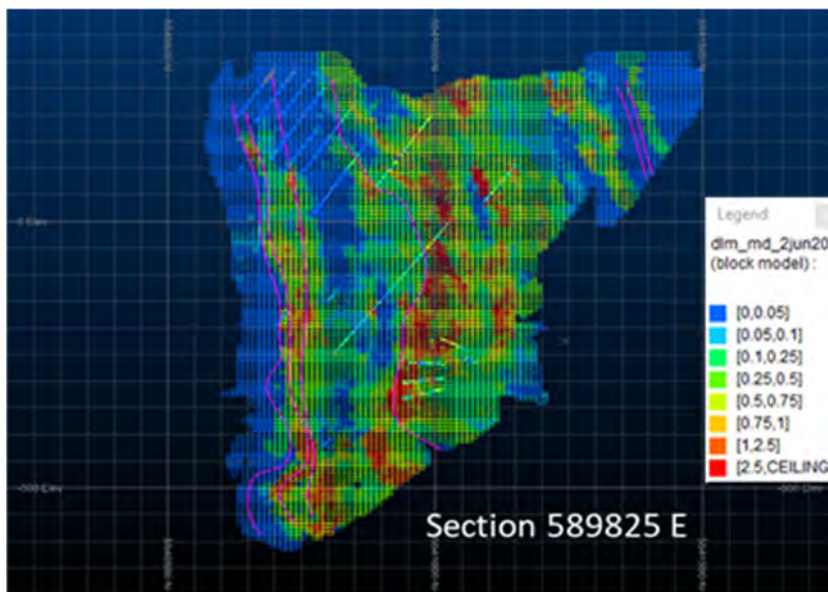


Table 14-11: Mineral Domain 1 – Capped

Min Zone	Field	Min	Max	Mean	Var
MZ 1	AUMZ1_ID	0.001	14.04	1.22	1.283
	AUMZ1ID2	0.001	19.50	1.21	1.425
	AUMZ1ID3	0.001	23.17	1.20	1.583
	AUMZ1_NN	0.001	36.61	1.17	4.561
	AUMZ1_OK	0.001	16.80	1.21	1.278
	% RD NN_OK			3.3%	
MZ 2	AUMZ2_ID	0.001	11.25	0.79	0.549
	AUMZ2ID2	0.001	14.42	0.79	0.632
	AUMZ2ID3	0.001	17.45	0.78	0.722
	AUMZ2_NN	0.001	57.96	0.79	2.570
	AUMZ2_OK	0.001	11.46	0.79	0.536
	% RD NN_OK			0%	
MZ 3	AUMZ3_ID	0.001	10.60	0.34	0.114
	AUMZ3ID2	0.001	12.03	0.34	0.130
	AUMZ3ID3	0.001	13.94	0.33	0.146
	AUMZ3_NN	0.001	24.60	0.33	0.481
	AUMZ3_OK	0.001	9.47	0.34	0.110
	% RD NN_OK			2.9%	

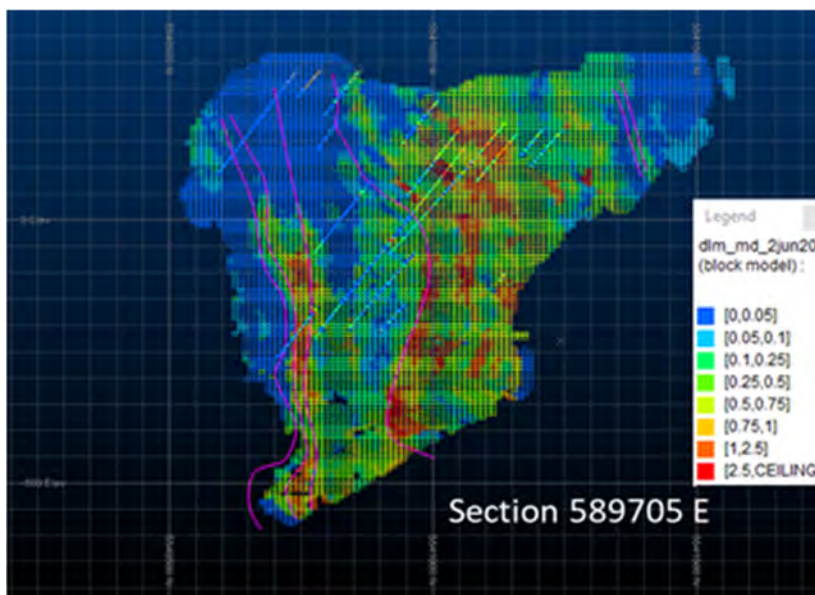


Figure 14-10: Model Grade Distribution (Section 589825E)



Note: Figure prepared by Kirkland Lake Gold, 2020.

Figure 14-11: Model Grade Distribution (Section 589705E)



Note: Figure prepared by Kirkland Lake Gold, 2020.

Validation checks were made on the Zone 58N model to ensure an acceptable interpolation of gold grade. These include visual checks on section, global statistical checks (descriptive statistics), local statistical checks (swath plots) and smoothing checks (quantile–quantile plots). For the 2 m composites estimate, no significant issues were identified and the representation of gold grades in the block model from the 2 m composites was considered to be acceptable. Sensitivity estimations for the top 500 m of the deposit using full-domain and 1 m composites investigated the impact of capping and high grade restraining within the mineralized domains. A multiple indicator kriging (MIK) model was developed using a broad 50 ppb Au envelope as an estimate comparison. Only blocks estimated in the first three passes were considered (up to and including the Pass 3 search ellipse).

The sensitivity estimations show similar contained ounces for the four principal methods of interpolation with grades varying according to the level of smoothing observed. The MIK model reported more tonnage due to the lack of geological constraint at a grade similar to the full-domain composites. The 2 m composite model was used for tabulating the Mineral Resource estimate.

14.2.10 Mineral Resource Classification

Mineral Resources at Detour Lake were classified as follows:

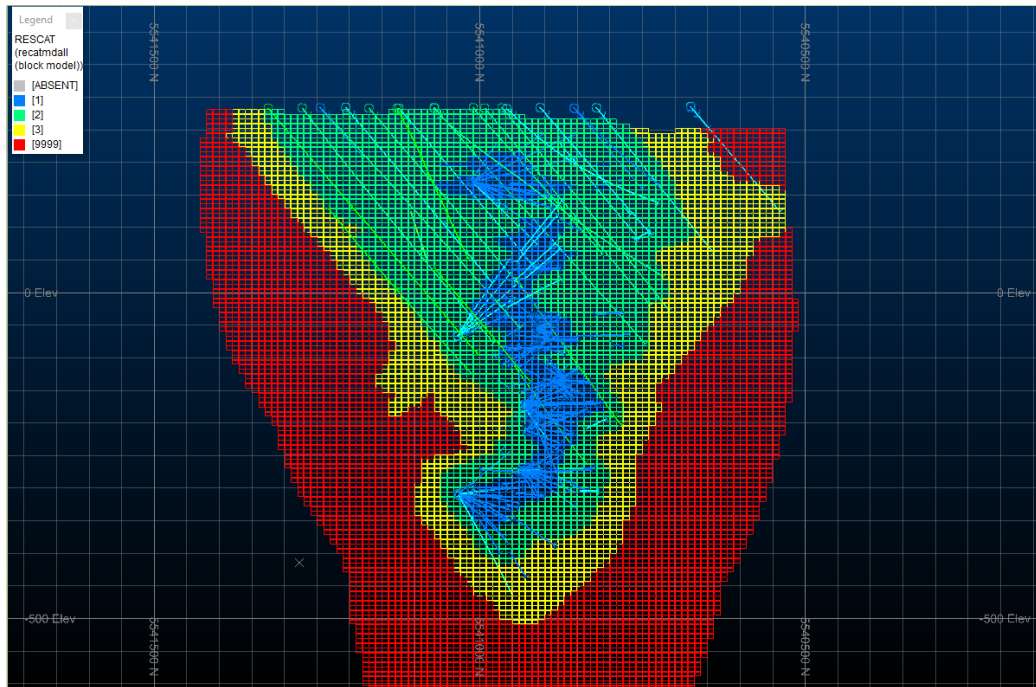
- Measured: blocks recognized by adjacent holes on a nominal 20 x 20 m grid (or less) in section and on plan;
- Indicated: blocks recognized by adjacent holes on a nominal 40 x 40 m grid (or less) in section and on plan;
- Inferred: blocks recognized by adjacent holes on a nominal 100 x 100 m grid (or less) in section and on plan;
- Other: all other estimated blocks.

Figure 14-12 is an example section showing the assigned confidence categories for Detour Lake.

The following parameters were used to determine the Mineral Resource classification for the West Detour deposit:

- Measured: a minimum of three drill holes with a nearest composite point <22 m away;
- Indicated: a minimum of three drill holes with a nearest composite point <44 m away;
- Inferred: a minimum of three drill holes with a nearest composite point <100 m away.

Figure 14-12: Example Confidence Classifications, Detour Lake Mine (Section 591670E)



Note: Figure prepared by Kirkland Lake Gold, 2020. 1 (blue) = Measured, 2 (green) = Indicated, 3 (yellow) = Inferred, 9999 (red) = unclassified or other.

As the drill grid in West Detour is mostly spaced at 40 m, most of the estimated blocks were classified as Indicated. Figure 14-13 is an example cross-section showing the assigned confidence categories for West Detour.

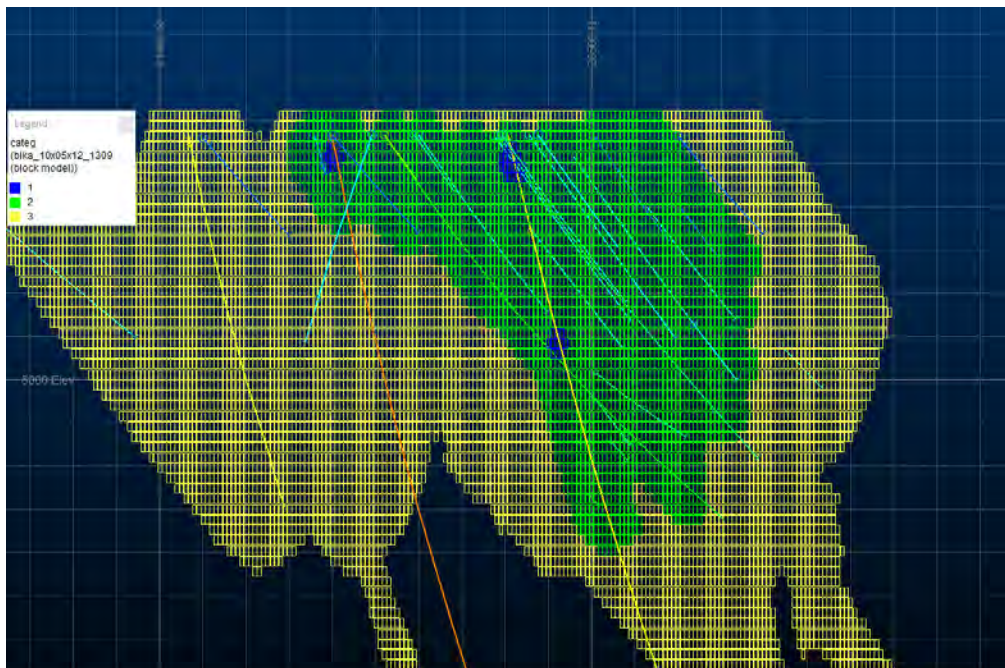
The following parameters were used to determine the Mineral Resource classification for the North Pit:

- Measured: no blocks were classified as Measured;
- Indicated: a minimum of three drill holes with a nearest composite point <30 m away;
- Inferred: a minimum of two drill holes with a nearest composite point <60 m away.

Due to the approximate 40 m drill hole spacing, the classification criteria can result in isolated columns of Inferred blocks within the core of the Indicated material. To account for isolated blocks, polylines were created at a nominal 30 m area of influence from the drill holes on an inclined plan perpendicular to the direction of the drill holes.

These polylines were used to create an Indicated wireframe to capture these isolated Inferred blocks and converted them to Indicated. Similarly, for isolated unclassified or Indicated blocks within the Inferred class material, polylines were created to capture isolated unclassified and Indicated blocks and convert them to Inferred.

Figure 14-13: Example Confidence Classifications, West Detour (Section 16,000E)



Note: Figure prepared by Kirkland Lake Gold, 2020. 1 (blue) = Measured, 2 (green) = Indicated, 3 (yellow) = Inferred.

Figure 14-14 shows the blocks classified as Indicated and Inferred for blocks with gold grades ≥ 0.50 g/t Au. Figure 14-15 is an example cross-section showing the assigned confidence categories for the North Pit area.

Mineral Resource confidence categories for the Zone 58N deposit are based on the estimation passes, which in turn are a function of drill hole spacing and minimum composites to estimate a block. The drill hole spacing at Zone 58N is about 25 x 25 m in the upper 500 m of the deposit with a sparser drill hole spacing of approximately 40 x 40 m deeper than 500 m.

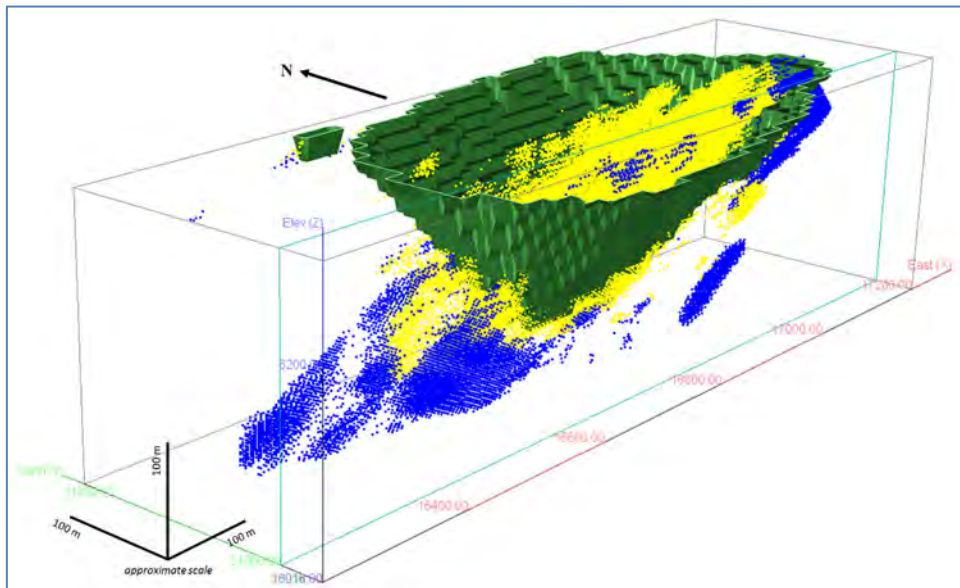
The following parameters were used to determine the Mineral Resource classification for Zone 58N:

- Measured: There are no blocks classified as Measured;
- Indicated: blocks estimated in passes 1, 2 and 3 above elevation 5780m RL;
- Inferred: blocks estimated in pass 4, in addition to estimation passes 1, 2 and 3 below elevation 5780m RL;
- All material below elevation 5780m RL is considered Inferred due to the wider drill hole spacing.

The Mineral Resource classification in section view for the Zone 58N deposit is shown in Figure 14-16.

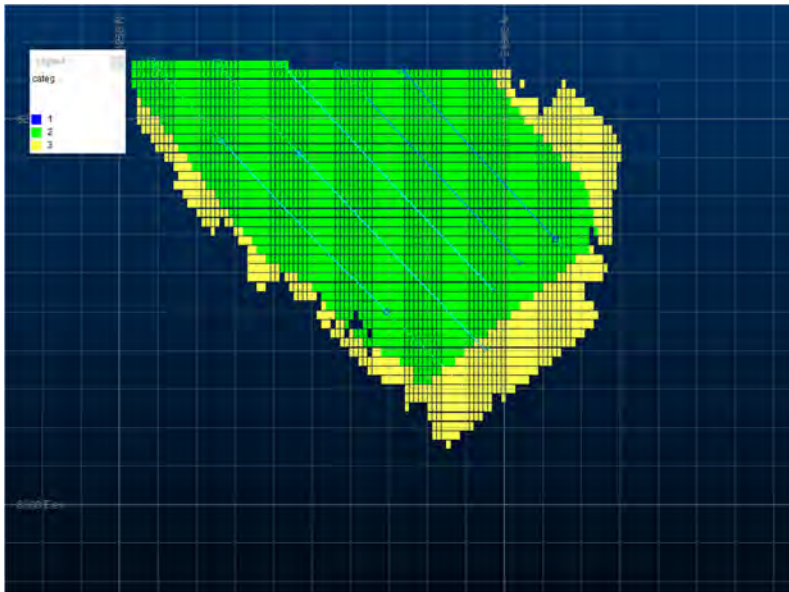


Figure 14-14: North Pit Block Classification



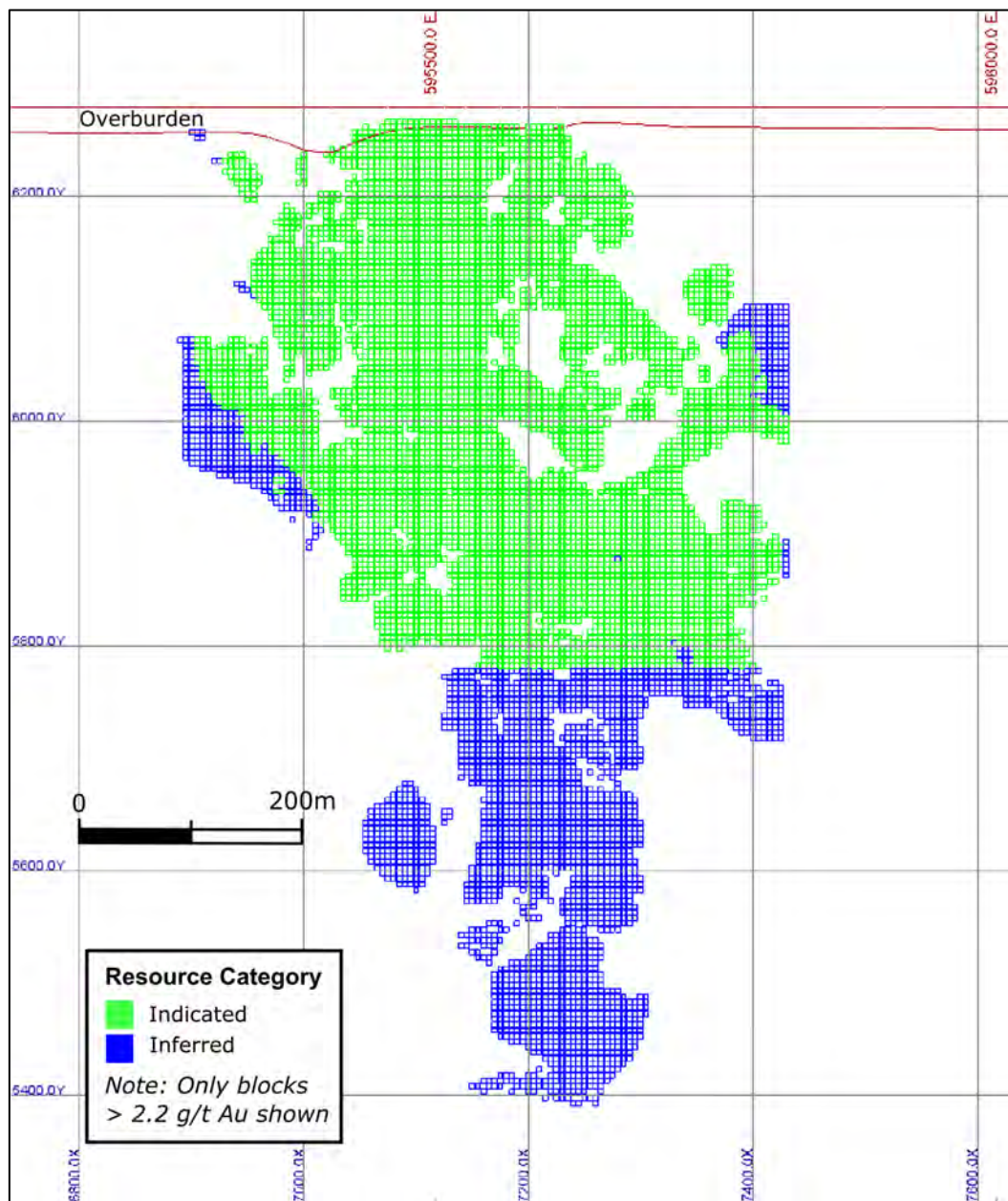
Note: Figure prepared by Detour Gold, 2018. Indicated (yellow) and Inferred (blue) resource blocks with gold grades ≥ 0.50 g/t Au. Figure looks northeast.

Figure 14-15: Example Confidence Classifications (Section 16,660E, mine grid)



Note: Figure prepared by Kirkland Lake Gold, 2020. 1 (blue) = Measured, 2 (green) = Indicated, 3 (yellow) = Inferred.

Figure 14-16: Zone 58N Block Classification Composite Longitudinal Section (5,533,700 N)



Note: Figure prepared by Detour Gold, 2018. Figure looks north.

14.3 Models Supporting the Mineral Resource Estimates

The descriptions provided in Section 14.2 for the estimates for the Detour Lake, North Pit and Zone 58N remain the same for the resource model estimates.

The West Detour estimate that has updated model limits is discussed in this sub-section. The updated model is only used for Mineral Resource reporting, and does not support the Mineral Reserves.

14.3.1 Introduction

The models that support the Mineral Resource estimates have a boundary between the West Detour and Detour Lake models at easting 590140.

The geological model, estimation domains, and resources estimate were completed using Datamine Studio RM ver. 1.9.36. For the West Zone 1, West Zone 2, West Zone 3, West Zone 4 and the South Zone, these were updated in Seequent's Leapfrog Geo 3D modeling software, after completing modeling in Datamine and used for resource estimation.

14.3.2 Modifications to Database

The Mineral Resource estimate update for West Detour contains 381,403.7 m of drilling, including 185,043.2 m of drilling conducted by Kirkland Lake Gold from February 15, 2020 to July 26, 2021. The total drill hole database was filtered to exclude drill hole data east of 590,420E. Drill holes with non-sampled intervals had gold values replaced with 0.001 g/t Au, on the assumption that these intervals did not show indicators of mineralization and were not sampled. A total of 11,438 samples from the 2020–2021 drilling program had assay results pending and were flagged with a code of -999.00. These samples were omitted from the database used in estimation.

14.3.3 Domaining

The West Detour area was domained into 10 zones (Table 14-12). Domains were constructed on 40 m north–south oriented cross sections using polylines, which were then used to construct wireframe volumes.

The domains were designed based primarily on visual observation of gold grade, however, zones may coincide with geological features that can be identified over longer strike lengths such as the chert marker seen in the South Zone or chloritic alteration in the LG1 Zone. A plan view of the mineralized domains, excluding overburden, is presented in Figure 14-17. Gold assay statistics for the global dataset, as well as by domain are presented in Table 14-13.

14.3.4 Block Model Parameters

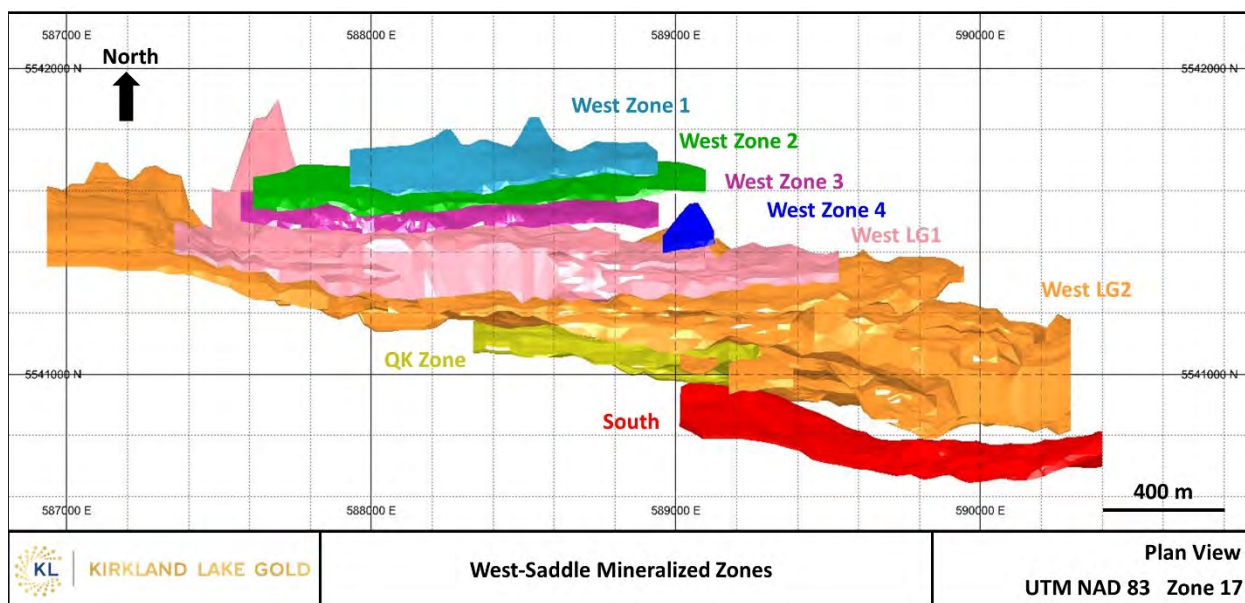
The block model parameters are presented in Table 14-14. The block model encompasses the estimation domains which strike east/west. Therefore, no rotation of the block model was required. The origin is defined by the lower left corner of the block model. The block size of 10 x 10 x 7.25 m was selected as an appropriate SMU to accommodate for the drill hole spacing and width of the mineralization and to match the Detour Lake block size..



Table 14-12: West-Saddle Detour Domains

Zone Code	Mineral Zones
0	Overburden
1	West Zone 1
2	West Zone 2
3	West Zone 3
4	West Zone 4
5	South Zone
6	West LG1
7	West LG2
8	QK Zone
100	Unmodeled space

Figure 14-17: West Detour Domains



Note: Figure prepared by Kirkland Lake Gold, 2021.

Table 14-13: Assay Statistics Summary

Zone Name	Zone Code	# Records	Au Min (g/t)	Au Max (g/t)	Au Mean (g/t)	Variance	StandDev	COV	Midrange
Global		1,544,302	0.000	1,940.00	0.622	28.849	5.371	8.63	970.00
West Zone 1	1	1,616	0.001	56.90	0.444	5.092	2.257	5.09	28.45
West Zone 2	2	2,575	0.000	580.84	0.621	133.442	11.552	18.61	290.42
West Zone 3	3	3,740	0.000	137.50	0.503	10.531	3.245	6.45	68.75
West Zone 4	4	924	0.000	6.62	0.087	0.191	0.437	5.05	3.31
South Zone	5	22,321	0.000	350.50	1.505	52.024	7.213	4.79	175.25
West LG1	6	55,011	0.001	1,050.00	0.694	75.306	8.678	12.50	525.00
West LG2	7	218,860	0.001	1,940.00	0.683	46.716	6.835	10.01	970.00
QK Zone	8	16,816	0.001	183.87	0.954	20.605	4.539	4.76	91.94
Unmodeled space	100	1,222,439	0.000	1,814.00	0.589	23.121	4.808	8.17	907.00

Table 14-14: Block Model Parameters

Axis	Block Size	Block Origin	Number of Blocks
X	10	586650	656
Y	10	5539800	270
Z	7.25	-704.75	141

14.3.5 Capping and Compositing

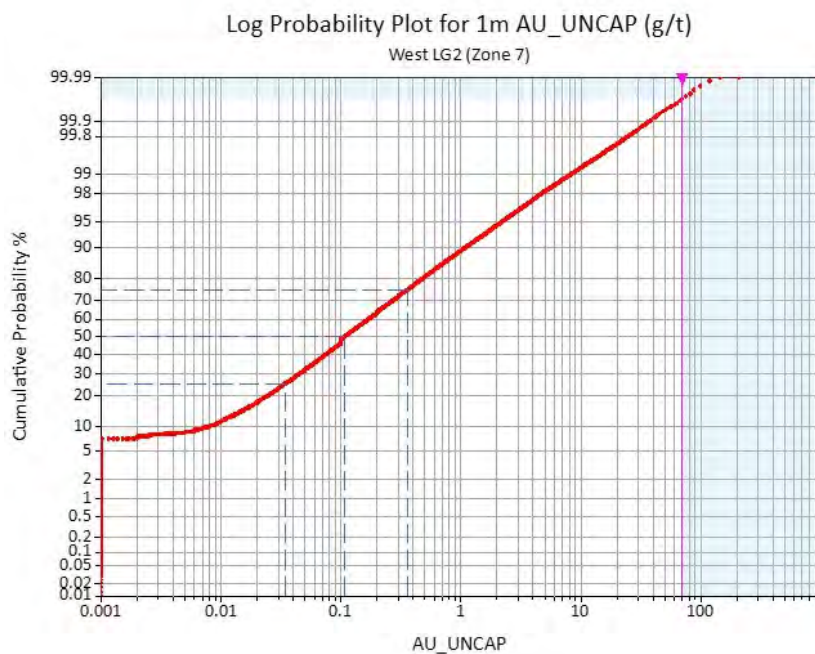
Estimation of highly-skewed gold grade distributions can be sensitive to the presence of even a few extreme values resulting in an overestimation of the mean. To better estimate the true mean grade of the deposit, a detailed capping study was performed on a domain-by-domain basis using one-meter downhole composites. A 1 m downhole composite was selected because the median sample interval length is 1 m for the West Detour database. Outlier gold grades within the domains were identified using cumulative frequency plots. An example is presented in Figure 14-18.

Table 14-15 presents the capping limits by domain. Table 14-16 summarizes the capped descriptive statistics for the global dataset and by domain.

The capped 1 m composites were composited again to 5 m downhole composites by domain based on assumed mining unit parameters. The 5 m downhole composite length was decided to fit approximate two composite samples along the drill hole inclined trace (approximately 50°) on the vertical height of the block (7.25 m) in the block model. Table 14-17 summarizes the descriptive statistics for the 5 m composites for the global population and by domain.



Figure 14-18: Example Cumulative Frequency Plot



Note: Figure prepared by Kirkland Lake Gold, 2021.

Table 14-15: Capping Limits by Domain

Zone Code	Mineral Zones	Capping Limit (Au g/t)
0	Overburden	N/A
1	West Zone 1	9
2	West Zone 2	10
3	West Zone 3	18
4	West Zone 4	1.8
5	South Zone	35
6	West LG1	50
7	West LG2	70
8	QK Zone	31
100	Unmodeled space	7

Table 14-16: Capped 1 m Composites Statistics Summary

Zone Name	Zone Code	# Records	Cut Value Au (g/t)	# Samples Cut	Au Max (g/t)	Au Mean (g/t)	COV	Percentile	Metal Loss (%)
West Zone 1	1	1,727	9	8	9.0	0.330	2.84	99.5	12.3
West Zone 2	2	2,476	10	9	10.0	0.356	2.74	99.6	20.6
West Zone 3	3	3,641	18	11	18.0	0.395	3.75	99.7	10.1
West Zone 4	4	472	1.8	12	1.8	0.120	2.85	97.5	18.9
South Zone	5	23,815	35	66	35.0	1.060	3.19	99.7	7.7
West LG1	6	51,671	50	34	50.0	0.530	4.42	99.9	8.9
West LG2	7	216,350	70	70	70.0	0.570	4.33	100.0	4.7
QK Zone	8	15,143	31	34	31.0	0.820	3.06	99.8	5.1
Unmodeled space	100	420,814	7	962	7.0	0.114	4.35	99.8	17.4

Table 14-17: Capped 5 m Composites Statistics Summary

Zone Name	Zone Code	# Records	Au Max (g/t)	Au Mean (g/t)	COV
Global		142,710	35.96	0.329	2.82
West Zone 1	1	343	3.53	0.379	2.18
West Zone 2	2	496	3.86	0.357	1.41
West Zone 3	3	720	4.78	0.398	1.77
West Zone 4	4	95	1.32	0.122	1.82
South Zone	5	4,745	21.30	1.065	1.76
West LG1	6	10,327	20.47	0.534	2.28
West LG2	7	45,735	35.96	0.590	2.15
Unmodeled space	100	80,249	7.00	0.110	2.71

14.3.6 Variography

Variography was completed by modeled domain using the capped 5 m composites. The variograms were rotated into the plane of the modeled domains and modeled using a normal scores transformation. The nugget was determined from the downhole variogram, and two spherical structures were used to fit the modeled variogram to the identified pairs. Variograms have a significant nugget with an average of 29%. The average variogram range is 142 m.

The average well-defined anisotropy had the best continuity along an east–west strike, was steeply dipping to the north, and gently plunging toward the west. The average anisotropy

is 7:3:1 (Major: semi-major: minor axis). Variogram parameters by modeled domains are summarized in Table 14-18. Figure 14-19 presents the modeled variogram for LG2 domain.

14.3.7 Estimation Methodology

The estimation of gold grades for West Detour were completed using OK. Prior to estimation, the capped 5 m composites from the QK domain (zone code 8) and the West LG2 domain (zone code 7) were combined to a single zone code 7. As the QK domain and the West LG2 domain occupy the same space towards the east, the domains were combined in order to allow the estimation to occur seamlessly across the boundary. The remaining domains, as well as the combined LG2–QK domain were estimated using hard boundaries.

The orientation of the search ellipse for zone codes 1 through 6 were controlled using a dynamic anisotropy methodology. Dynamic anisotropy points were estimated based on the surface of the domain wireframes. Each point was assigned a dip value and dip direction (azimuth) based on the attitude of the surface at that point. The points were used to interpolate the dip and dip direction into the block model.

The remaining zones were estimated using a search ellipse oriented in the same direction as the modeled variograms. Gold was estimated in six passes of expanding volumes. The first two passes used a minimum of seven composites and a maximum of 16 composites to estimate a block, and the third to sixth passes included a minimum of four composites and maximum of 16. In the multiple pass process, once a block was estimated, it was not re-estimated in subsequent passes.

Table 14-19 summarizes the estimation parameters for the West Detour model.

14.3.8 Validation

The OK gold grade estimate was validated using multiple lines of evidence including statistical and visual methods.

Statistical Validation

Nearest neighbor and ID2 interpolants were completed to compare estimated gold grades to the OK estimate. Table 14-20 compares the descriptive statistics for the capped composites, against the OK estimate and the validation NN and ID2 estimate globally, and by estimation domain. In addition to the descriptive statistics, cumulative frequency plots for the OK, NN, and ID2 estimated were examined by domain and globally. Figure 14-20 shows the estimate cumulative frequency plot for the LG2 estimation domain. The global mean gold grade for the NN and OK models are within 5%. Estimates for all mineral domains compare well and the estimate is considered acceptable.



Table 14-18: Variogram Parameter Summary

Zone	Zone Code	Rotation (ZXZ)			Nugget	Structure 1				Structure 2				Dynamic Anisotropy
		Angle 1	Angle 2	Angle 3		Range Dir 1	Range Dir 2	Range Dir 3	Sill	Range Dir 1	Range Dir 2	Range Dir 3	Sill	
Overburden	0													
West Zone 1	1	-5	55	-170	0.135	115	73	7	0.51	145	84	15	0.354	Yes
West Zone 2	2	-5	55	-170	0.135	115	73	7	0.51	145	84	15	0.354	Yes
West Zone 3	3	5	70	-175	0.232	22	21	13	0.329	140	56	18	0.439	Yes
West Zone 4	4	-10	65	-175	0.232	22	21	13	0.329	140	56	18	0.439	Yes
South Zone	5	0	85	-175	0.383	14	14	7	0.459	50	24	12	0.158	Yes
West LG1	6	5	75	-175	0.391	37	17	20	0.422	200	96	34	0.187	Yes
West LG2	7	5	65	-170	0.452	23	15	10	0.405	171	80	30	0.142	No
Unmodeled space	100	5	65	-170	0.452	23	15	10	0.405	171	80	30	0.142	No



Figure 14-19: LG2 Domain Variogram

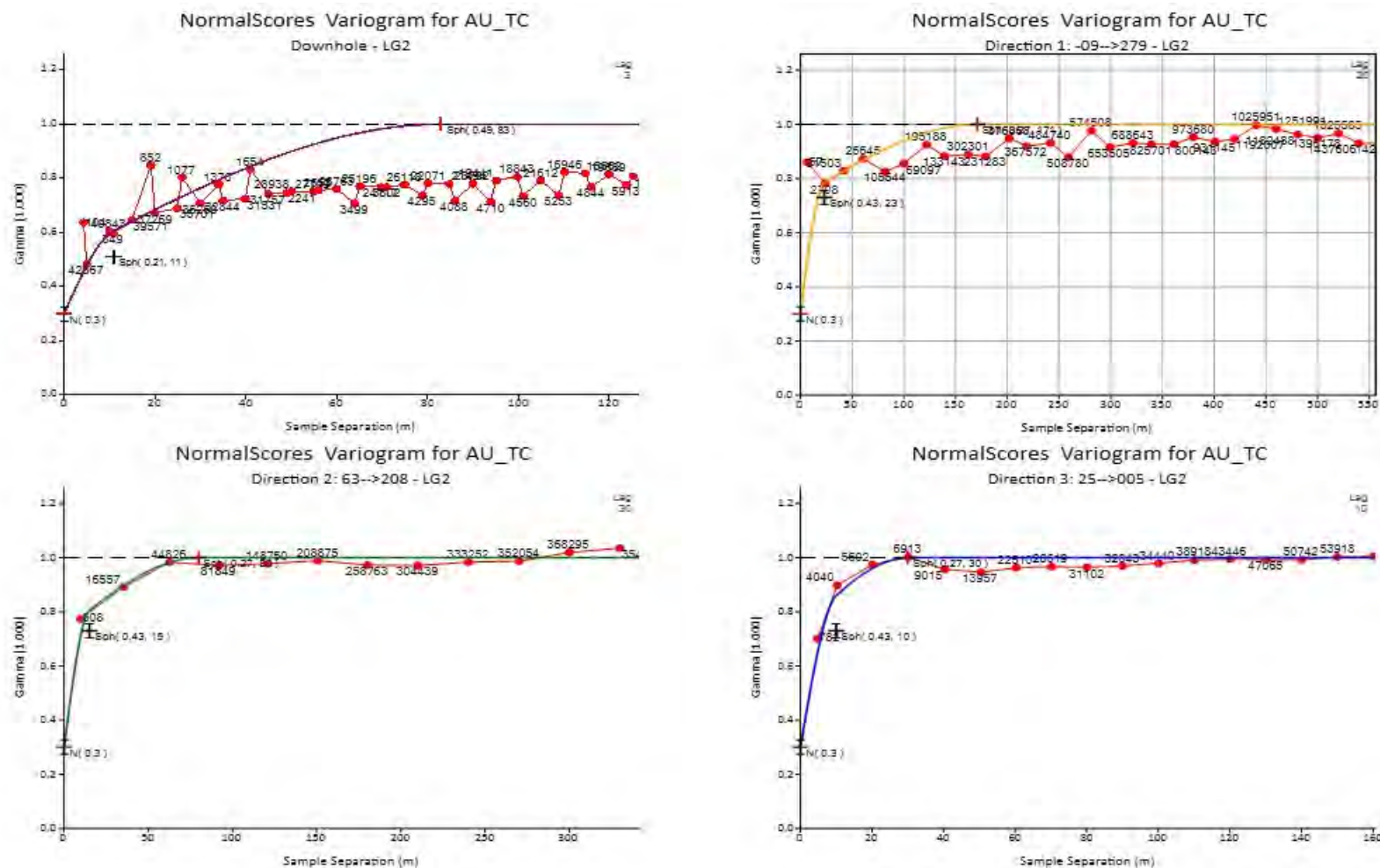


Table 14-19: Grade Estimation Search Parameters

Zone	Pass #	Axis			Rotation (ZXZ)			Min # Samples	Max Samples per Drill Hole	Max # Samples
		Major	Semi Major	Minor	Azi (°)	Dip (°)	Spin (°)			
West Zone 1	Pass 1	50	30	10	-5	55	-170	7	3	16
	Pass 2	100	60	20				4		
	Pass 3	150	90	30						
	Pass 4	200	120	40						
	Pass 5	250	150	50						
	Pass 6	300	180	60						
West Zone 2	Pass 1	50	30	10	-5	55	-170	7	3	16
	Pass 2	100	60	20				4		
	Pass 3	150	90	30						
	Pass 4	200	120	40						
	Pass 5	250	150	50						
	Pass 6	300	180	60						
West Zone 3	Pass 1	50	30	10	5	70	-175	7	3	16
	Pass 2	100	60	20				4		
	Pass 3	150	90	30						
	Pass 4	200	120	40						
	Pass 5	250	150	50						
	Pass 6	300	180	60						
West Zone 4	Pass 1	50	30	10	-10	65	-175	7	3	16
	Pass 2	100	60	20				4		
	Pass 3	150	90	30						
	Pass 4	200	120	40						
	Pass 5	250	150	50						



Zone	Pass #	Axis			Rotation (ZXZ)			Min # Samples	Max Samples per Drill Hole	Max # Samples
		Major	Semi Major	Minor	Azi (°)	Dip (°)	Spin (°)			
	Pass 6	300	180	60						
South Zone	Pass 1	50	30	10	0	85	-175	7	3	16
	Pass 2	100	60	20				4		
	Pass 3	150	90	30						
	Pass 4	200	120	40						
	Pass 5	250	150	50						
	Pass 6	300	180	60						
West LG1	Pass 1	50	30	10	5	75	-175	7	3	16
	Pass 2	100	60	20				4		
	Pass 3	150	90	30						
	Pass 4	200	120	40						
	Pass 5	250	150	50						
	Pass 6	300	180	60						
West LG2	Pass 1	50	30	10	5	65	-170	7	3	16
	Pass 2	100	60	20				4		
	Pass 3	150	90	30						
	Pass 4	200	120	40						
	Pass 5	250	150	50						
	Pass 6	300	180	60						
Unmodeled space	Pass 1	50	30	10	5	65	-170	7	3	16
	Pass 2	100	60	20				4		
	Pass 3	150	90	30						
	Pass 4	200	120	40						
	Pass 5	250	150	50						



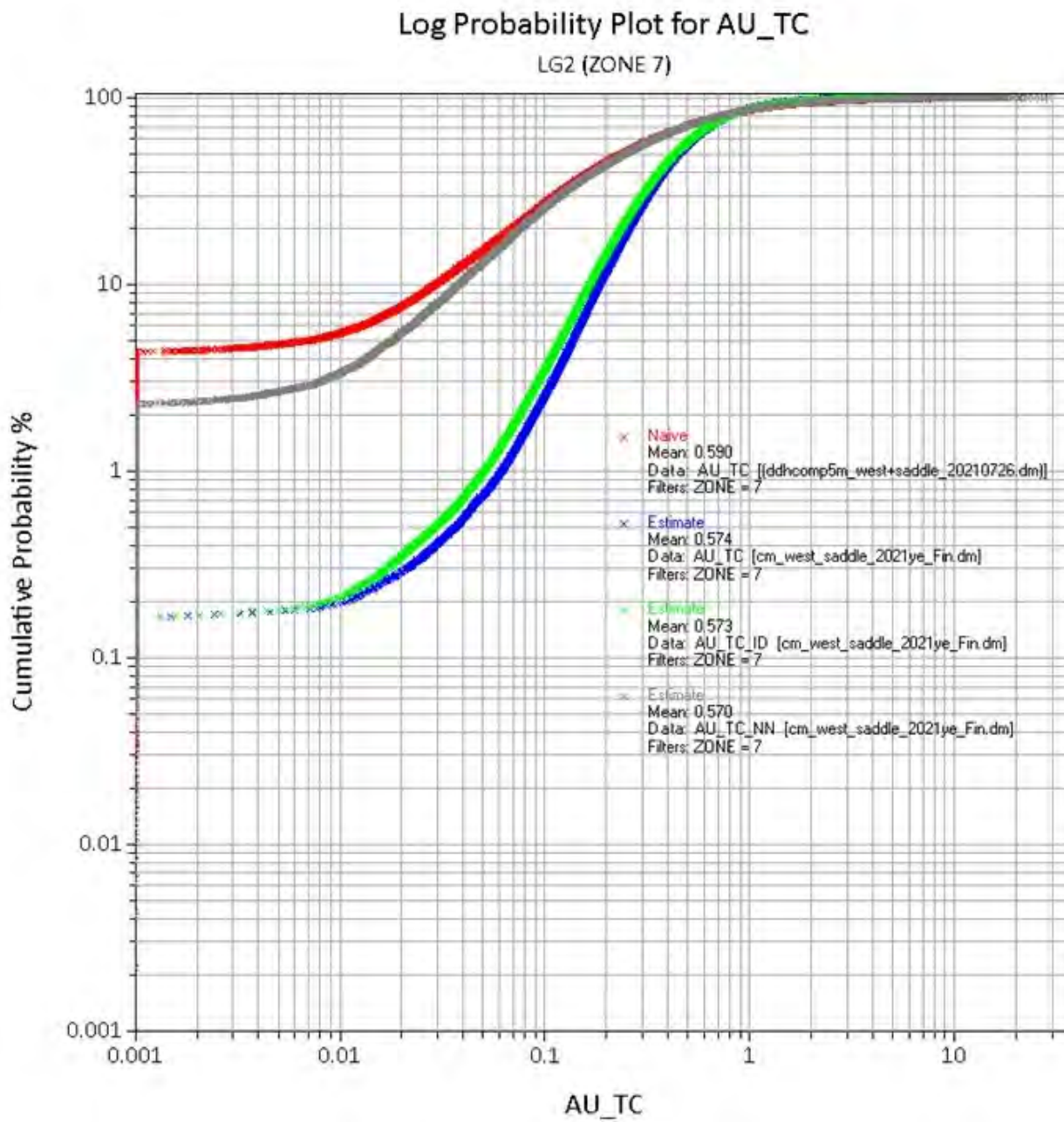
Zone	Pass #	Axis			Rotation (ZXZ)			Min # Samples	Max Samples per Drill Hole	Max # Samples
		Major	Semi Major	Minor	Azi (°)	Dip (°)	Spin (°)			
	Pass 6	300	180	60						

Table 14-20: Comparison of Composites to OK, NN, and ID2 Estimates

Zone	Zone Code	Statistics	5m Comp Sample	OK	ID2	NN	%RD NN_OK
West Zone 1	1	Min	0.001	0.006	0.004	0.001	
		Max	3.531	1.261	1.379	3.531	
		Mean	0.333	0.359	0.345	0.376	4.7%
		Variance	0.234	0.039	0.041	0.169	
West Zone 2	2	Min	0.001	0.009	0.007	0	
		Max	3.855	2.156	1.983	3.855	
		Mean	0.357	0.32	0.307	0.33	3.1%
		Variance	0.253	0.042	0.038	0.206	
West Zone 3	3	Min	0	0.009	0.007	0	
		Max	4.776	2.216	2.48	4.708	
		Mean	0.398	0.338	0.32	0.339	0.3%
		Variance	0.496	0.051	0.055	0.327	
South Zone	5	Min	0.001	0.001	0.001	0.001	
		Max	21.303	5.776	5.953	14.491	
		Mean	1.065	0.749	0.732	0.718	-4.1%
		Variance	3.519	0.276	0.335	1.607	
West LG1	6	Min	0.001	0	0	0	
		Max	20.467	6.447	8.784	20.467	
		Mean	0.534	0.515	0.515	0.516	0.2%
		Variance	1.479	0.223	0.268	1.301	
West LG2	7	Min	0	0	0	0	
		Max	35.964	13.966	19.408	35.964	
		Mean	0.59	0.574	0.573	0.57	-0.7%
		Variance	1.605	0.215	0.279	1.432	
Unmodeled space	100	Min	0	0	0	0	
		Max	7	2.319	2.93	13.051	
		Mean	0.11	0.024	0.024	0.024	0.0%
		Variance	0.089	0.006	0.007	0.019	



Figure 14-20: Cumulative Frequency Plot for LG2 Estimation Domain



Note: Figure prepared by Kirkland Lake Gold, 2021.

Swath Plots

Swath plots were generated to compare average estimated gold grade from the OK method to the two validation model methods (ID and NN). The results from the OK model, plus those for the validation ID model method, were compared to the distribution derived from the NN model using swath plots.

Three swath plots of gold grades were generated and reviewed for each domain. Swath plots for gold are presented for LG2 in Figure 14-21 to Figure 14-23. Oriented swath plots generally show good agreement between composites and OK-ID2 block grades. Where there are fewer data, the swath plots show lower agreement between the 5 m composites and the OK-ID2 gold grade estimated.

Visual Inspection

Modeled gold grades from the OK estimate were compared against 5 m composites in long section (Figure 14-25), cross section (Figure 14-26), and down bench (Figure 14-27). Figure 14-24 show the locations of the sections.

Visually, there is good agreement between the composite grades and the estimates. The modeled blocks display continuity of grades along strike, down dip, and plunge directions. Visual inspection of the estimates for zones 1–6 show that they honor the dynamic anisotropy points/surfaces as well.

14.3.9 Density

Kirkland Lake Gold continues to gather density readings specific to this area for the various lithologies and mineralized zones. Because of this, no changes have been made to the assigned densities stated in the previous technical report. The overburden was assigned a density of 1.8 t/m³ and the bedrock was assigned a density of 2.9 t/m³. Along the contact between the overburden and the bedrock, the weighted average of the densities were calculated.

14.3.10 Mineral Resource Classification

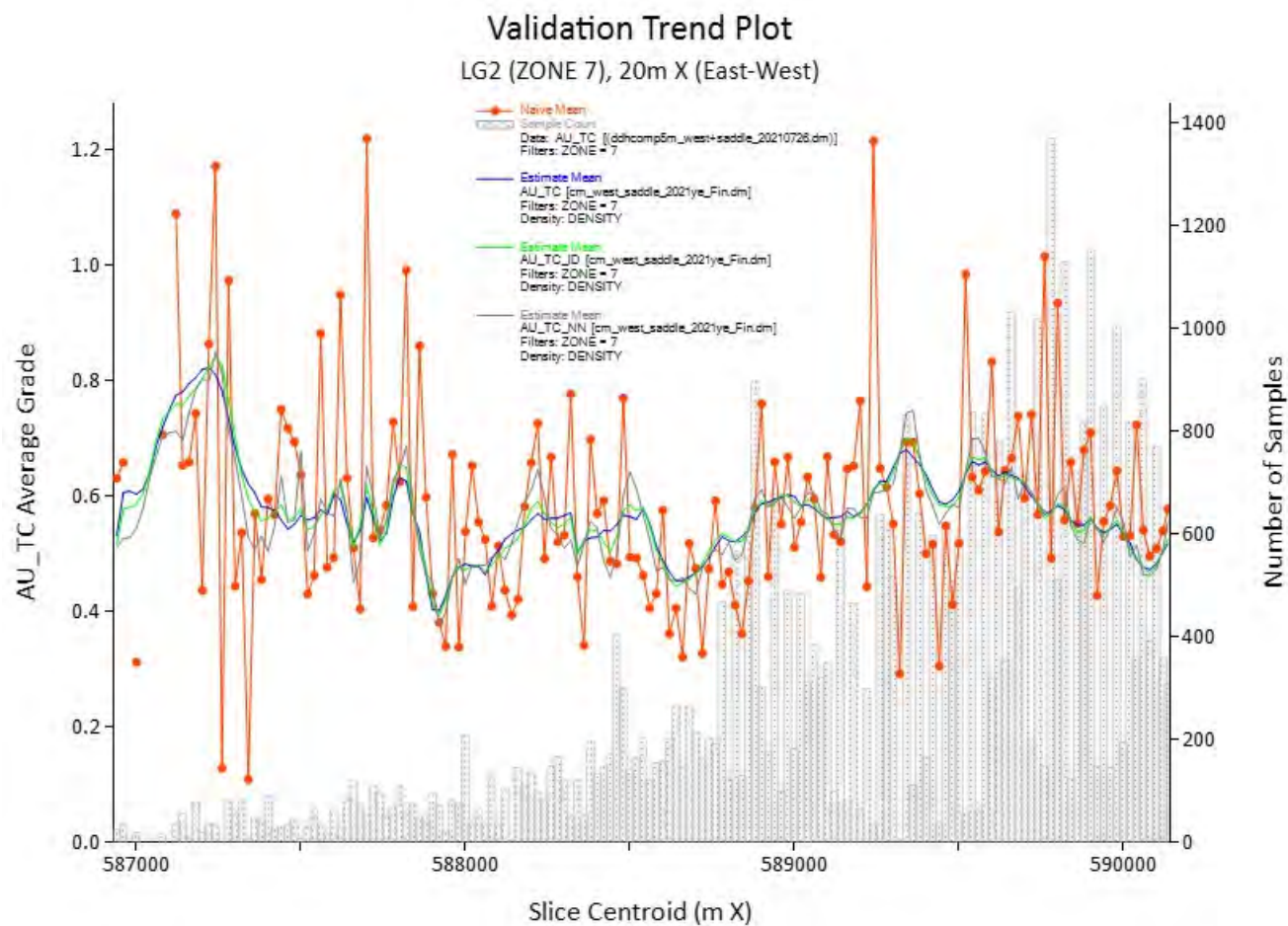
The QP classified the Mineral Resources as Indicated, and Inferred using the number of drillholes used to estimate a block, the estimation pass, and the minimum distance from the nearest composite. No blocks were classified as Measured.

Blocks were assigned a classification of Indicated if the block was informed by a minimum of three drill holes, was estimated within the first two estimation passes, and was informed by a drill hole with a composite within 50 m of the block.

Blocks were classified as Inferred if the block was informed by a minimum of three drill holes, was estimated within the first four estimation passes, and was informed by a drill hole with a composite within 100 m of the block.



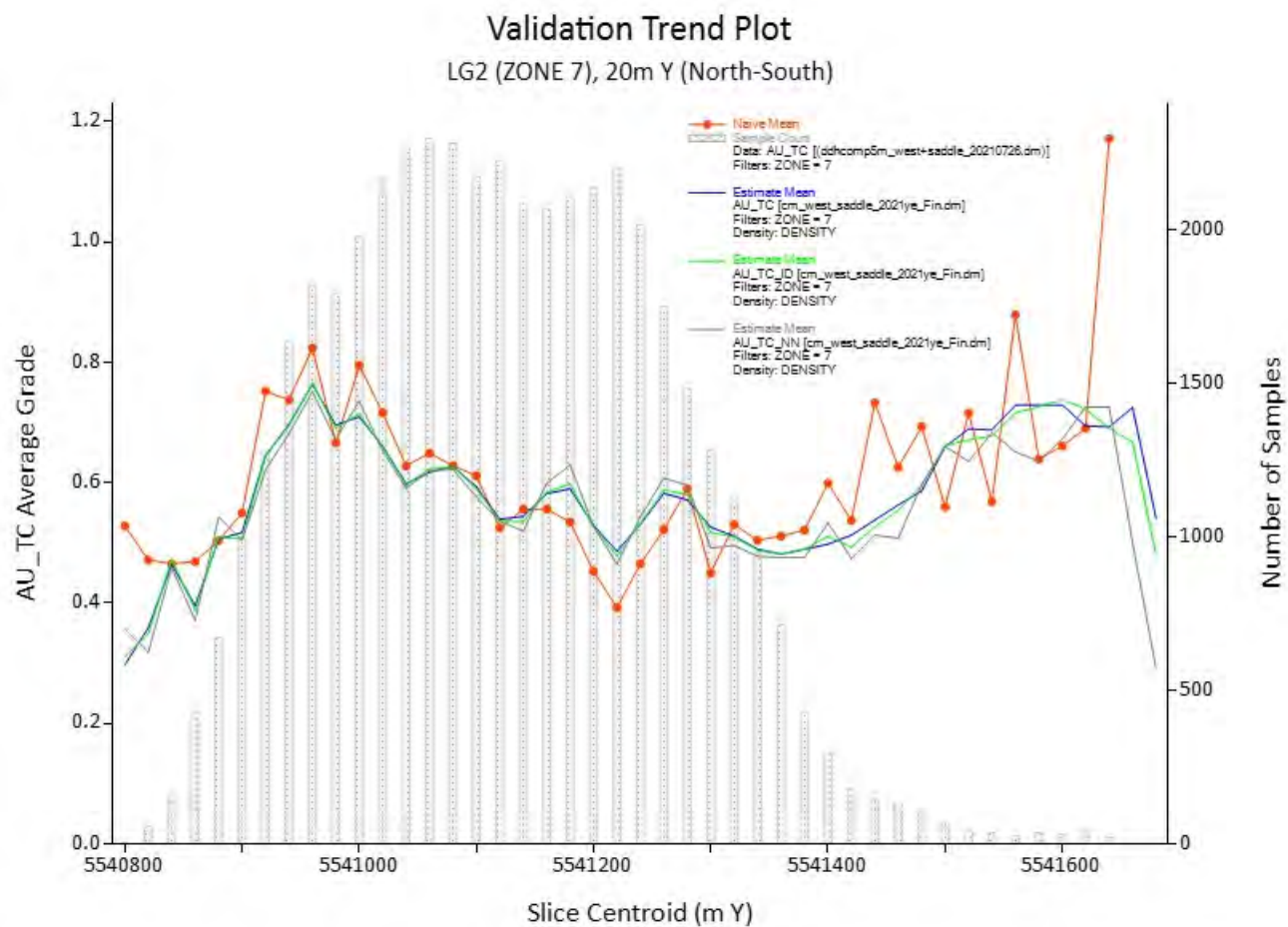
Figure 14-21: Domain LG2 East-West Swath Plot



Note: Figure prepared by Kirkland Lake Gold, 2021.



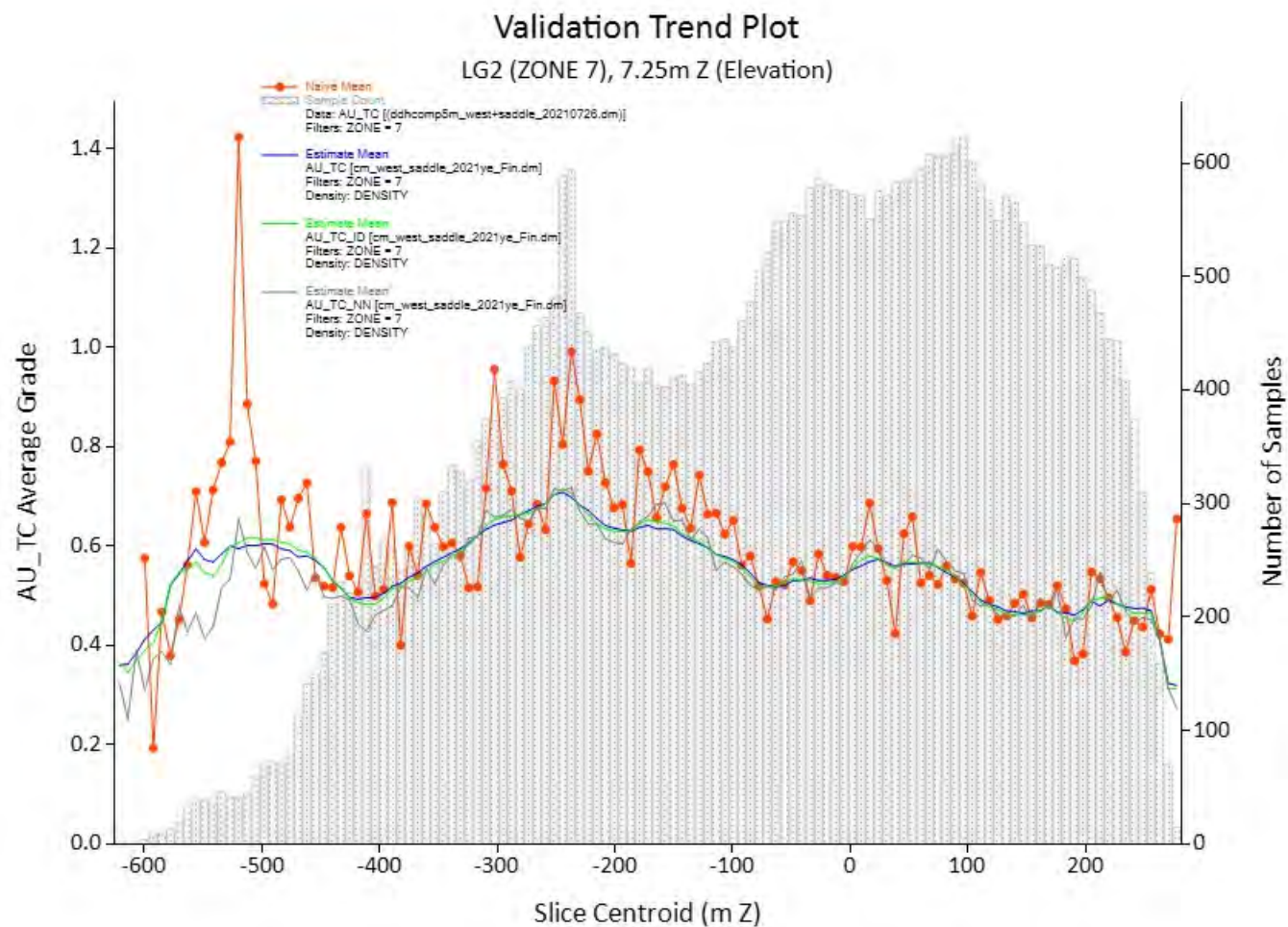
Figure 14-22: Domain LG2 North-South Swath Plot



Note: Figure prepared by Kirkland Lake Gold, 2021.



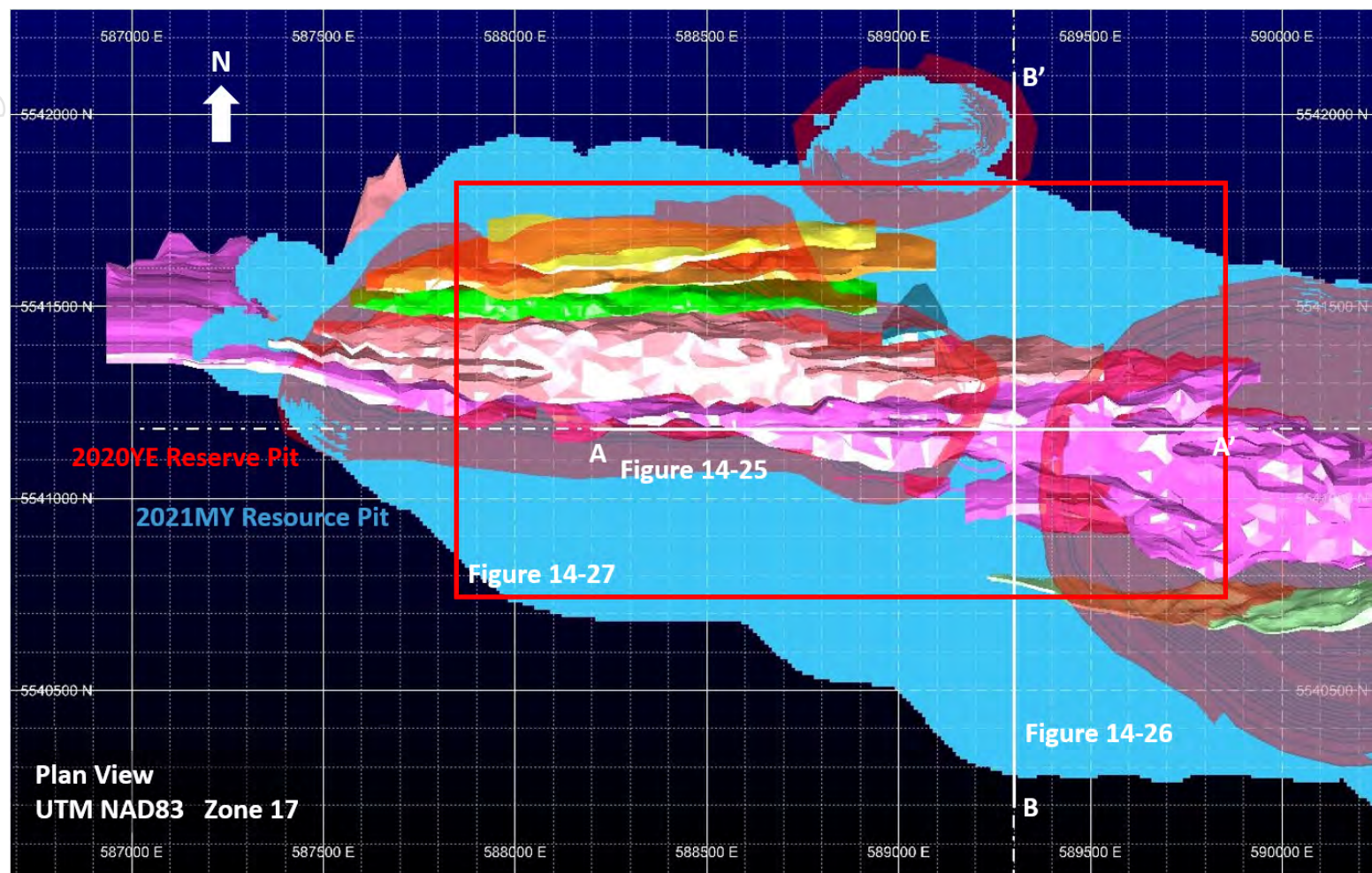
Figure 14-23: Domain LG2 Top-Bottom Swath Plot



Note: Figure prepared by Kirkland Lake Gold, 2021.

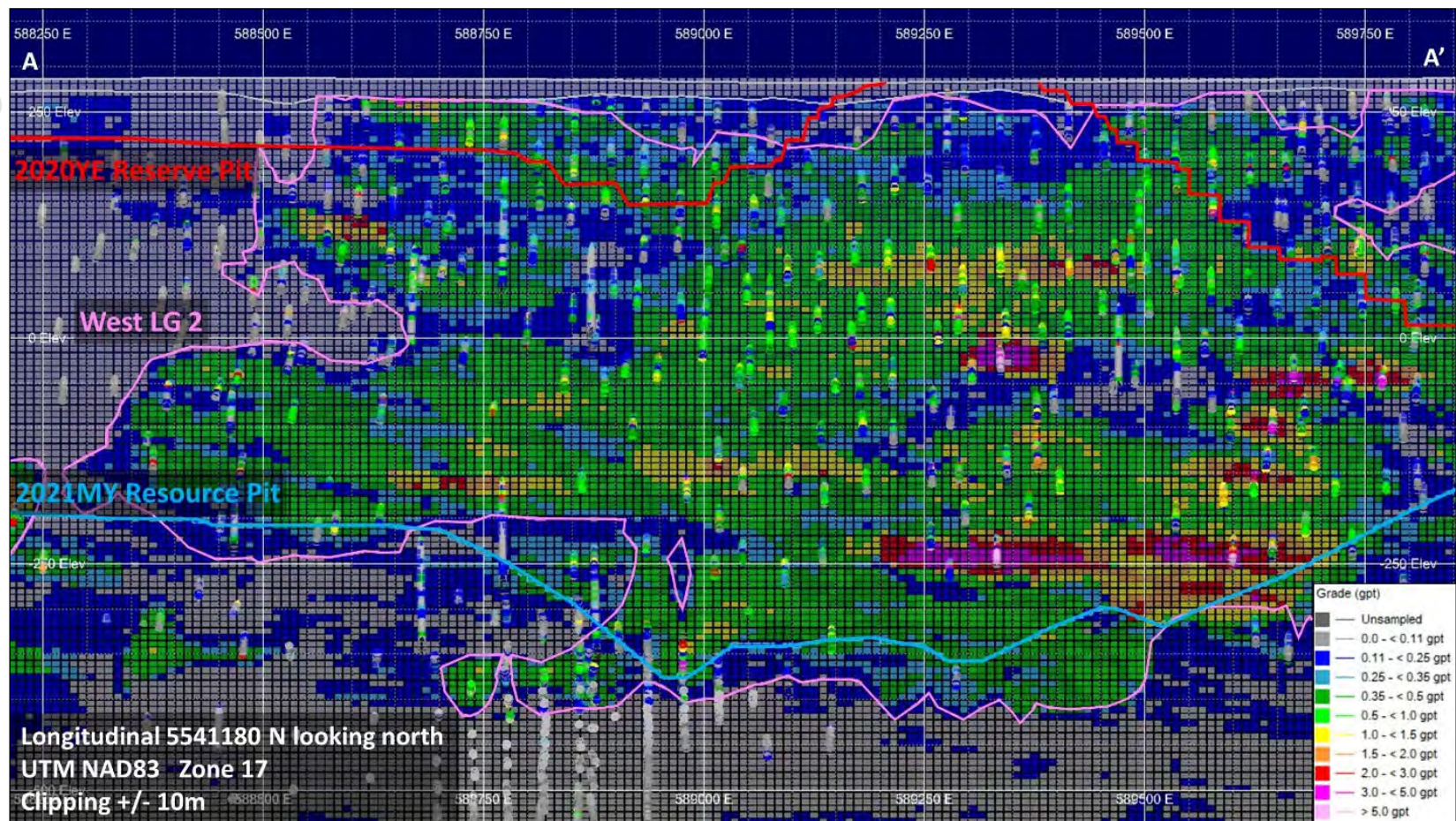


Figure 14-24: Plan Map for Locations of Sections



Note: Figure prepared by Kirkland Lake Gold, 2021.

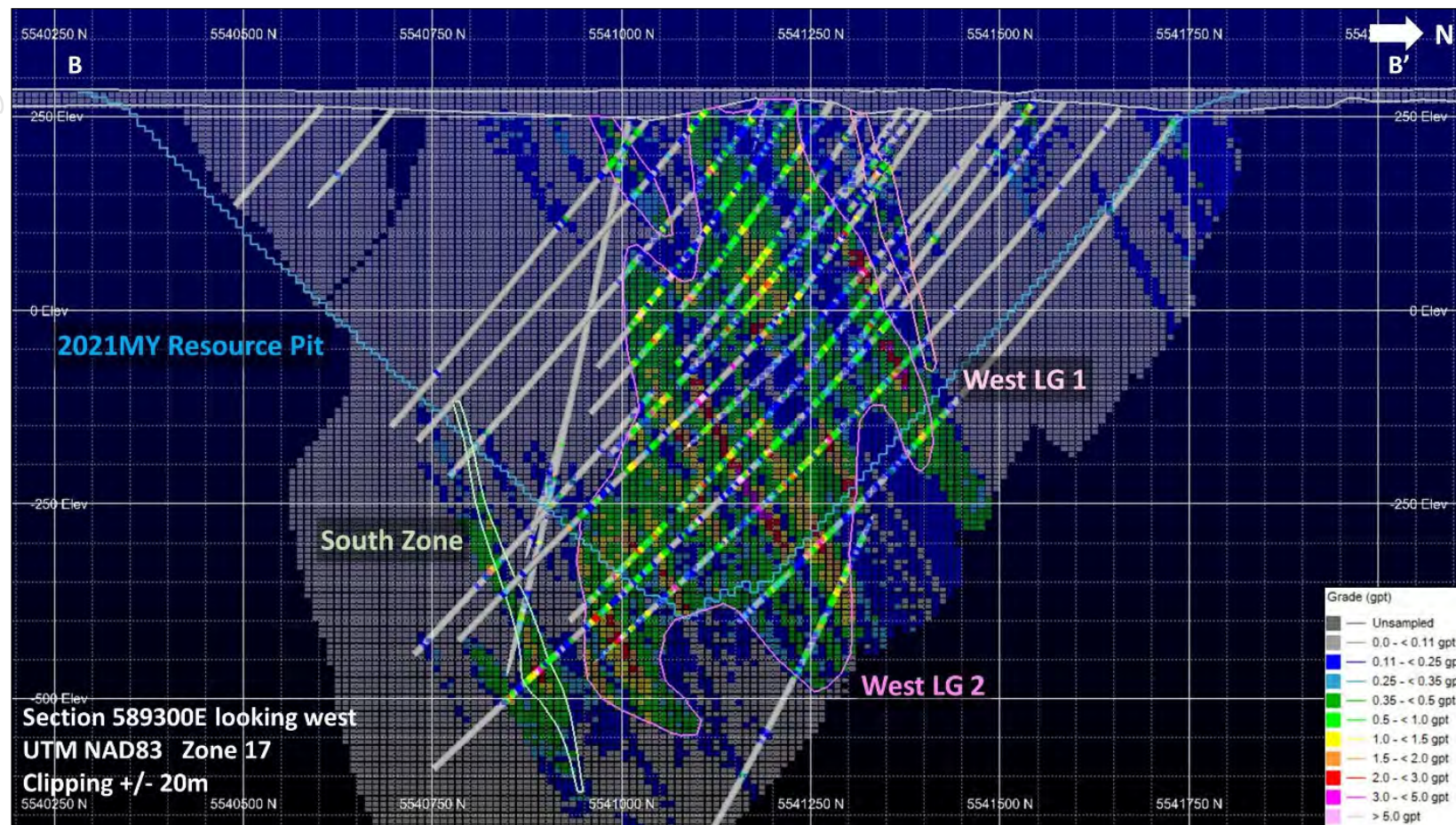
Figure 14-25: Block Model Long Section 5541180N



Note: Figure prepared by Kirkland Lake Gold, 2021.



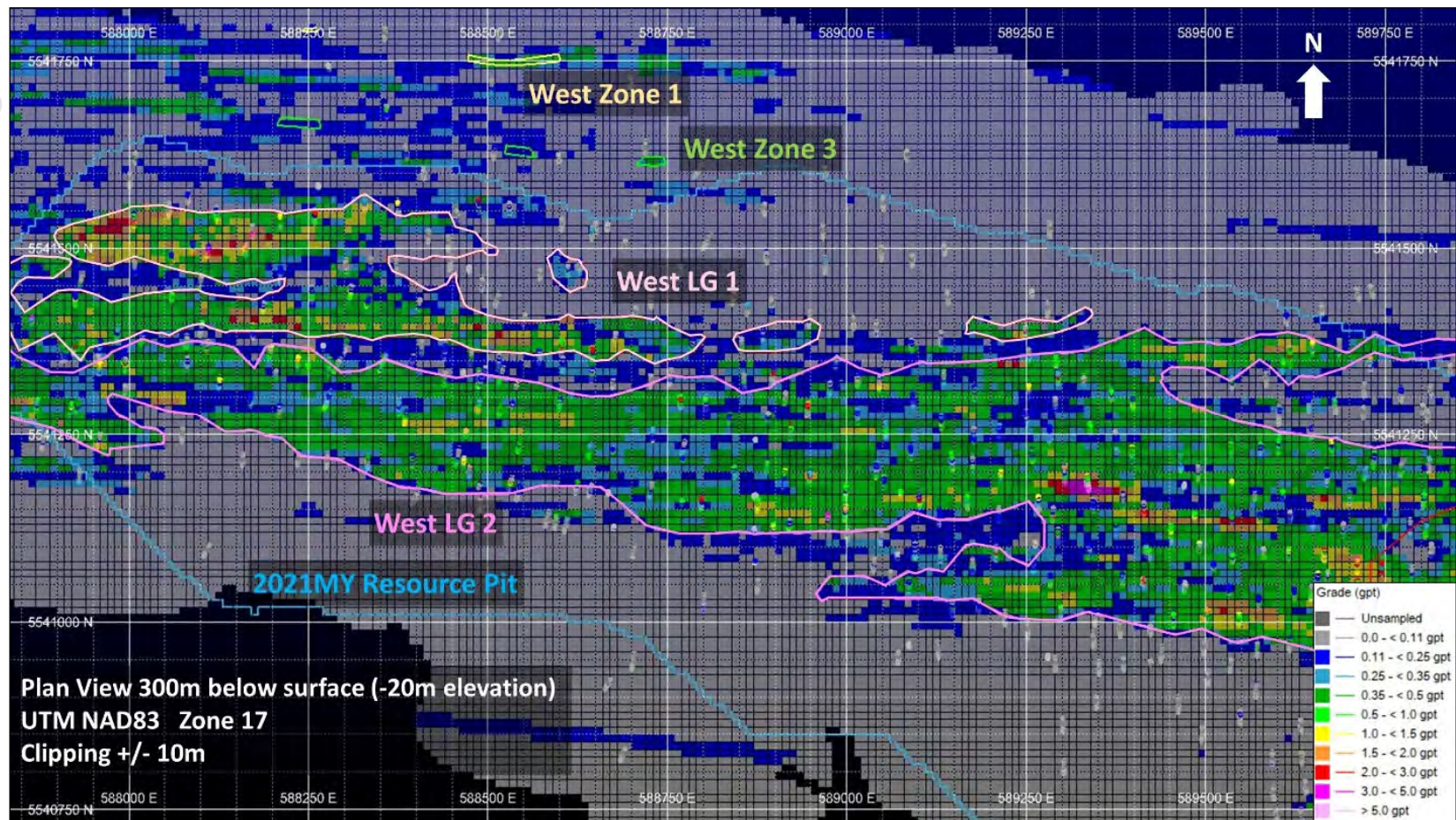
Figure 14-26: Block Model Cross Section 589300E



Note: Figure prepared by Kirkland Lake Gold, 2021.



Figure 14-27: Block Model Bench Section 300 m below surface (-20 m elevation)



Note: Figure prepared by Kirkland Lake Gold, 2021.

A visual check was completed to re-classify blocks from Inferred to Indicated if the Inferred blocks were isolated within the bulk of the indicated blocks. Strings created on 40 m sections were used to create a wireframe boundary for re-classification. All remaining estimated blocks were not classified.

14.4 Reasonable Prospects for Eventual Economic Extraction

The Detour Lake, West Detour and North Pit resource models were combined in a common model. A pit optimization exercise using Maptek-Vulcan was conducted based on the parameters listed in Table 14-21. The exercise constrained the Measured, Indicated and Inferred Resources estimates. A revenue factor of one was used to guide the pit design. The conceptual pit layouts are shown in Figure 14-28 in relation to the final designed Mineral Reserve pit outlines.

The conceptual pit encompassed both Detour Lake and West Detour within a single pit. The North Pit remained as a separate pit. For resource estimation reporting purposes, the common model was divided along section line 16,995 E to separate the Detour Lake estimate from the West Detour estimate. The combined model was adjusted for mining depletions as of end July, 2021. The estimate is reported above variable cut-off grades that range from 0.35–0.5 g/t Au.

The Zone 58N deposit assumes that it will be mined using underground mining methods, based on the use of transverse and longitudinal long-hole stopes. The stoping geometry and stope heights are based on geological interpretation with dilution assumptions considered. The mineralized domains were modelled with a minimum thickness of 4 m downhole (approximately 3 m true thickness), to ensure that minimum underground mining widths were addressed. The estimate is reported above a cut-off grade of 2.2 g/t Au using the parameters listed in Table 14-22.

14.5 Mineral Resource Statement

Mineral Resources are reported using the 2014 CIM Definition Standards and are reported exclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Mineral Resources are reported in Table 14-23 and Table 14-24. The Mineral Resources estimated for the North Pit and Zone 58N have an effective date of December 31, 2020. The Mineral Resources estimated for Detour Lake and West Detour have an effective date of 26 July, 2021. The Qualified Person for the Detour Lake, North Pit, and Zone 58 N estimates is Mr. Andre Leite, P.Eng., a Kirkland Lake Gold employee. The Qualified Person for the West Detour estimate is Mr. Juan Figueroa, P.Geo., a Kirkland Lake Gold employee.

Table 14-21: Conceptual Resource Pit Optimization Parameters

Parameters	Units	Value
Gold price	(US\$/oz)	1,500
Exchange rate	(\$C/US\$)	1.31
Royalty	%	2
Refiner charge	%	0.05
Net gold price	(C\$/oz)	1,921
Metallurgical recovery	(%)	Various (based on formulae)
Mining cost (excluding vertical cost increment)	(C\$/t mined)	3.05
Process cost	(C\$/t milled)	8.82
G&A	(C\$/t milled)	3.47
Sustaining capital (non mining)	(C\$/t milled)	2.19
Sustaining capital (mining)	(C\$/t mined)	0.56
Value per gram	(\$C/g Au)	56.58
Breakeven cut-off grade	g/t	0.32
Marginal cut-off grade	g/t	0.22
\$/bench 7.25 m	C\$/t/bench	0.019
Pit slope angle	Degrees	25–58

Figure 14-28: Isometric View of the Mineral Reserve Pits (Brown) in Relation to the Mineral Resource Pits (Green)

Note: Figure prepared by Detour Gold, 2021.

Table 14-22: Underground Cut-off Grade Input Parameters

Parameters	Units	Value
Gold price	US\$/oz	1,300
Exchange rate	US\$/C\$	1.25
Mill recovery	%	97
Refining costs	C\$/oz	5.00
Mining cost (average cost)	C\$/t	75
Processing & tailings costs	C\$/t	9.00
G&A costs	C\$/t	11.50
Mining dilution	% at zero grade	12
Calculated cut-off grade	g/t Au	2.2



Table 14-23: Measured and Indicated Mineral Resource Statement

Deposit	Cutoff Grade (g/t Au)	Measured			Indicated			Total Measured and Indicated		
		Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
Detour Lake	0.35–<0.5	3.0	0.42	41	68.9	0.42	932	71.9	0.42	973
West Detour		—	—	—	113.5	0.42	1,530	113.5	0.42	1,530
North Pit		—	—	—	0.2	0.43	2	0.2	0.43	2
<i>Subtotal</i>		<i>3.0</i>	<i>0.42</i>	<i>41</i>	<i>182.5</i>	<i>0.42</i>	<i>2,464</i>	<i>185.5</i>	<i>0.42</i>	<i>2,505</i>
Detour Lake	>0.5	22.8	1.68	1,231	—	182.8	1.00	5,872	205.6	1.07
West Detour		—	—	—	—	180.4	0.88	5,096	180.4	0.88
North Pit		—	—	—	—	0.5	0.90	15	0.5	0.90
<i>Subtotal</i>		<i>22.8</i>	<i>1.68</i>	<i>1,231</i>	<i>363.7</i>	<i>0.94</i>	<i>10,983</i>	<i>386.5</i>	<i>0.98</i>	<i>12,214</i>
Zone 58N	2.2	—	—	—	2.9	5.80	534	2.9	5.80	534
Total Measured and Indicated	Variable	25.8	1.53	1,272	549.1	0.79	13,981	574.9	0.83	15,252

Table 14-24: Inferred Mineral Resource Statement

Deposit	Cutoff Grade (g/t Au)	Inferred		
		Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
Detour Lake	0.35–<0.5	9.3	0.42	124
West Detour		10.8	0.42	146
North Pit		0.0	0.37	0
<i>Subtotal</i>		<i>20.0</i>	<i>0.42</i>	<i>270</i>
Detour Lake	>0.5	11.6	0.92	343
West Detour		16.6	0.94	502
North Pit		0.0	0.88	0

Deposit	Cutoff Grade (g/t Au)	Inferred		
		Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
<i>Subtotal</i>		28.3	0.93	845
Detour Lake (in Mineral Reserve pit)	0.35–<0.5	2.0	0.41	27
West Detour (in Mineral Reserve pit)		0.0	0.41	1
North Pit (in Mineral Reserve pit)		0.0	0.45	0
<i>Subtotal</i>		2.1	0.41	28
Detour Lake (in Mineral Reserve pit)	>0.5	1.9	0.83	52
West Detour (in Mineral Reserve pit)		0.1	0.67	1
North Pit (in Mineral Reserve pit)		0.0	0.85	0
<i>Subtotal</i>		2.0	0.83	53
Zone 58N	2.2	1.0	4.35	136
Total Inferred	Variable	53.4	0.78	1,332

Notes to accompany Mineral Resource tables:

1. The Mineral Resources estimated for the North Pit and Zone 58N have an effective date of December 31, 2020. The Mineral Resources estimated for Detour Lake and West Detour have an effective date of 26 July, 2021. The Qualified Person for the Detour Lake, North Pit, and Zone 58 N estimates is Mr. Andre Leite, P.Eng., a Kirkland Lake Gold employee. The Qualified Person for the West Detour estimate is Mr. Juan Figueroa, P.Geo., a Kirkland Lake Gold employee..
2. Mineral Resources are reported exclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Mineral Resources are reported using the 2014 CIM Definition Standards.
3. Mineral Resources considered amenable to open pit mining methods were estimated using a gold price of US\$1,500/oz, variable metallurgical recovery assumptions based on formulae, refining and transport costs of C\$5/oz Au, 2% royalty, mining costs of C\$3.05/t mined, process costs of C\$8.82/t milled, general and administrative costs of C\$3.59/t milled, non-mining sustaining capital costs of \$2.19/t milled, mining sustaining capital costs of C\$0.56/t mined, incremental bench cost of \$0.019/t/bench, and variable pit slope angles that range from 25–58°. The estimate is reported above cut-off grades that vary from 0.35–0.5 g/t Au.
4. Mineral Resources considered amenable to underground pit mining methods were estimated assuming long-hole and transverse stoping methods. The estimates used a gold price of US\$1,300/oz, metallurgical recovery assumption of 97%, refining and transport costs of C\$5/oz Au, average mining cost of C\$75/t mined, process and tailings costs of C\$9/t milled, general and administrative costs of C\$11.50/t, assumed dilution average of 12%. The estimate is reported above a cut-off grade of 2.2 g/t Au.
5. Estimates have been rounded in accordance with reporting guidelines. Totals may not sum due to rounding.

14.6 Factors that May Affect the Resource Estimate

Factors that may affect the Mineral Resource estimates include:

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

14.7 Comments on Mineral Resource Estimates

Mineral Resources are reported using the 2014 CIM Definition Standards.

There are no other environmental, legal, title, taxation, socioeconomic, marketing, political or other relevant factors known to the QP that would materially affect the estimation of Mineral Resources that are not discussed in this Report.

The QP notes that the updated resource model for West Detour (refer to Section 14.3) is not used in the current Mineral Reserve statement. The models as discussed in Section 14.2 support the Mineral Reserve statement. There is no material difference between the two West Detour resource models within the designed pit shapes that constrain the Mineral Reserve estimates.

The additional mineralization in the updated West Detour model represents potential Project upside. There is potential to redesign the Detour Lake and Detour West open pits to convert some or all of those Indicated Mineral Resources to Mineral Reserves, and thus revise the mine plan and potentially increase the mine life. However, mining studies such as assessment of tailings and waste rock storage capacities, optimized pit planning and consideration of any future permitting requirements will have to be considered in such a conversion.

15.0 Mineral Reserve Estimates

15.1 Introduction

Mineral Reserves are reported as the diluted ore tonnage and grade scheduled to be fed to the mill over the life of the operation, based on open pit mining methods. The associated production schedule considers an optimized mill and stockpile strategy to maximize discounted cash flows. Measured and Indicated Mineral Resources within the Detour Lake, West Detour and North Pit final pits as discussed in Section 14.2 were converted to Proven and Probable Mineral Reserves respectively. Inferred Mineral Resources captured within the pit shells were set to waste.

15.2 Block Model

A block size of 10 x 10 x 7.25 m was used for the Detour Lake, 10 x 5 x 12 m for West Detour, and 6 x 6 x 6 m was used for the North Pit. The models contain blocks coded with the following information:

- Gold grade (diluted and undiluted);
- Resource confidence category (Measured, Indicated and Inferred);
- Density;
- Lithology and domain;
- Material volumes (below topography, rock, overburden, fill material in historical underground workings and stopes).

15.3 Pit Optimization

15.3.1 Basis of Optimization

The pit optimization exercise was completed using Maptek Vulcan pit optimizer. Each deposit was optimized independently to reflect the different bench height planned for each pit. The optimization only considered Measured and Indicated Mineral Resources as possible cash flow-generating material; all Inferred Mineral Resources were treated as waste.

The gold grade of each block was adjusted for any overburden, till, or partial backfill from prior mining activities. The gold grades were also adjusted to account for mine dilution and ore losses. The dilution process was calibrated using production reconciliation results for the past four years.

The geotechnical parameters used in the optimization respect the prescribed intra-ramp angles for the Detour, West Detour and North pits as established by third-party consultants, Golder Associates (Golder 2019, 2020). The overall angles used in the optimization process account for final ramps and geotechnical catch berms requirements.

Gold recovery is calculated as a function of the diluted block grade and based on a recovery formula calibrated using past production results.

The parameters and respective values assumed in the pit optimization process are presented in Table 15-1. Based on the costs and price assumptions presented in the table, a set of pit shells associated with a range of revenue factors was generated for each of the deposits. The final pit selection was based on conventional best-worst case analysis of discounted cash-flows. The selected shells guiding final pit design were associated with revenue-factors of 0.88 for Detour, 0.95 for West Detour and 0.90 for the North Pit.

15.3.2 Engineered Pit Designs

The engineered pit designs were completed using the pit optimization shells as a guide in order to maximize the value and gold recovered inside the ultimate pits. The resulting pit designs include practical geometry that is required in an operational mine, such as the haul road to access all the benches, recommended pit slopes with geotechnical berms, proper benching configuration and smoothed pit walls.

Details of the designs are provided in Section 16 of this Report.

15.4 Cut-off Grade

The cut-off grade strategy adopted by Kirkland Lake Gold maximizes the discounted cashflows. The process was completed using Maptek Evolution Strategy software.

The cut-off evaluation incorporated considerations of mill and stockpile capacities, mine constraints and economic parameters when defining mill and stockpile cut-off grades over time in a yearly basis. Table 15-2 summarizes the average annual cut-off grades for the mill feed over the LOM. A minimum cut-off grade of 0.35 g/t Au is used. Mining will use a variable cut-off grade strategy, because it moves forward ounce production and delays stripping as much as possible as it aims to maximize discounted cash flows.

15.5 Dilution

Mine dilution is accounted for by the use of mine panels that emulate variable degrees of dilution as a function of the continuity of the mineralization at different cut-off grades.

The process use Maptek Vulcan implementation of a mine shape optimizer (MSO). Different panels sizes and dimensions were tested against production reconciliation results for the past four years (2016–2019) at a cut-off grade of 0.5 g/t Au.

The average dilution factored in over the LOM represents a 7% increase in tonnage and 6% lower grade.

Table 15-1: Pit Optimization Parameters

Optimization Parameter	Unit	Value
Gold price	US\$/oz	1,300
Exchange rate	C\$/US\$	1.31
Royalty	%	2
Refiner charge	%	0.05
Net gold prices	C\$/oz	1,665
Metallurgical recovery	%	Variable
Inter-ramp pit slope angles	°	25.1–56.3
Mining cost (excluding incremental haulage)	C\$/t mined	3.42
Incremental haulage cost		
Detour Lake Pit	C\$/7.25 m bench	0.019
West Detour and North Pit	C\$/6 m bench	0.015
Process cost	C\$/t milled	9.75
G&A	C\$/t milled	3.59
Sustaining capital (non-mining)*	C\$/t milled	3.42
Sustaining capital (mining)	C\$/t mined	0.35
Breakeven cut-off	g/t	0.40
Marginal cut-off	g/t	0.27

Note: = * includes First Nations agreements associated costs

Table 15-2: LOM Mill Cut-off Grades by Year

Year	Mill Cut-off Grade (g/t Au)
2021	0.57
2022	0.51
2023	0.56
2024	0.55
2025	0.48
2026	0.52
2027	0.36
2028	0.35
2029	0.36
2030	0.45
2031	0.56
2032	0.66
2033	0.68
2034	0.49
2035	0.50
2036	0.40

Year	Mill Cut-off Grade (g/t Au)
2037	0.53
2038	0.35

15.6 Mineral Reserves Statement

Mineral Reserves are reported using the 2014 CIM Definition Standards. The Qualified Person for the estimate is Mr. Andre Leite, P.Eng., a Kirkland Lake Gold employee.

Mineral Reserves have an effective date of December 31, 2020 and are summarized in Table 15-3. Mineral Reserves are reported based on optimized and variable yearly cut-off grades summarized in Table 15-2 and considering a minimum cut-off of 0.35 g/t Au.

There is no material difference between the two West Detour resource models within the designed pit shapes that constrain the Mineral Reserve estimates.

15.7 Factors that May Affect the Mineral Reserves Estimate

Factors that may affect the Mineral Reserve estimates include:

- Changes to the gold price and exchange rate assumptions;
- Changes to pit slope and geotechnical assumptions;
- Changes to operating cost assumptions used in the constraining pit shell;
- Changes to pit designs from those currently envisaged;
- Unforeseen dilution;
- Changes to hydrogeological and pit dewatering assumptions;
- Changes to inputs to capital and operating cost estimates;
- Ability to permit West Detour and North Pit pits and western extent of the ultimate Detour Lake pit;
- Changes to modifying factor assumptions, including environmental, permitting and social licence to operate.

Table 15-3: Mineral Reserves Statement

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

Notes to accompany Mineral Reserves table:

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

15.8 Comment on Mineral Reserves Estimates

Mineral Reserves are reported using the 2014 CIM Definition Standards.

There are no other environmental, legal, title, taxation, socioeconomic, marketing, political or other relevant factors known to the QP that would materially affect the estimation of Mineral Reserves that are not discussed in this Report.

16.0 Mining Methods

16.1 Overview

The Detour Lake Mine uses conventional truck-shovel open pit mining. The mine is operated using an Owner-operator mining equipment and labour strategy. Excluding the muskeg, overburden/till top layer, all material must be blasted. Pioneering drilling and blasting is required in the overburden/rock contact. Additionally, during winter months free digging of overburden material is not possible due to frost.

The mine operation also requires the management of old underground workings; in general, historical records of underground workings are very reliable. Standard operational procedures regulate the mining activity in these affected areas to ensure a safe operation and risk management.

Mining at West Detour is planned to employ similar conventional mining methods with the initial use of smaller equipment for the pre-stripping phase, especially in overburden. Given the smaller dimensions of the North Pit, a smaller fleet size will be used.

The mine production schedule forecasts a total 1,725 Mt to be mined over a period of 18 years (2021–2038). A total of 597 Mt of ore is planned to be milled over a period of 22 years (2021–2042); with the last four years of production supported by long-term stockpile reclaim.

The optimized and variable cut-off strategy combined with 158 Mt of stockpile capacity, results in an average LOM stripping ratio of 1.90.

16.2 Geotechnical Considerations

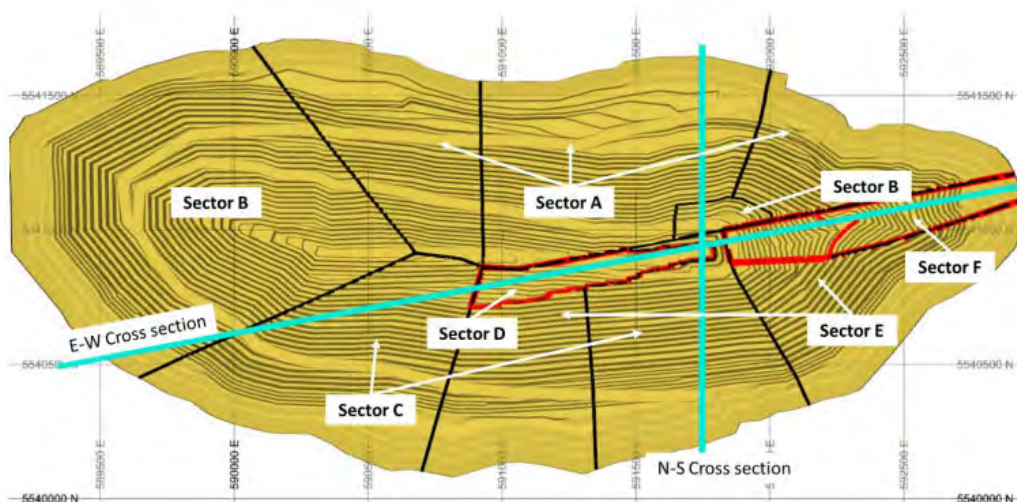
The geotechnical design parameters for Detour Lake Main Pit were reviewed by Golder in 2020 (Golder, 2020). The assessment accounts for a revised bench height of 14.5 m for the Main Pit implemented in 2020 and for information obtained as temporary and final walls are exposed. The geotechnical sectors are shown in Figure 16-1, and the pit slope assumptions are provided in Table 16-1.

The geotechnical parameters for the West Detour and North pit were also provided by Golder (Golder, 2013). In 2019 Golder re-assessed both West Detour and North Pit designs and confirmed previous recommendations. The bench face angles varied from 65–75° and the inter ramp angles varied between 46–56°. The main geotechnical parameters implemented in the ultimate pit design are schematically represented in Figure 16-2.

A process of ongoing geotechnical monitoring and documentation was implemented at the mine and additional risk mitigation techniques continue to be evaluated and employed as needed.



Figure 16-1: Detour Lake Pit Geotechnical Sectors



Note: Figure prepared by Golder, 2020.

Table 16-1: Detour Lake Pit Geotechnical Design Parameter

New Sector Label ¹	Sector Azimuth (°) from Bench Dip-Direction	Berm Width (m)	Bench Height (m)	Bench Face Angle (°)	Inter-Ramp Angle (°)
Overburden	All Sectors	20	12	65	25.1
Weathered Zone	All Sectors	7.5	15	65	46.0
Fresh Bedrock Zone					
A - North	145 - 245	19.3	29	90	56.3
B - West	045 - 145	21.8	29	90	53.1
C - South	295 - 045	6.4 (7.8) ²	14.5	70 (75) ²	51.0
D - East	245 - 295	7.2	14.5	70	49.2
E - North - UG ³	As per DXF Solid	21.8	29	90	53.1
F - Ultramafic Talc ⁴	As per DXF Solid	8.6	14.5	70	46.1

¹The design sectors remain identical to those presented previously (Golder, 2019b).

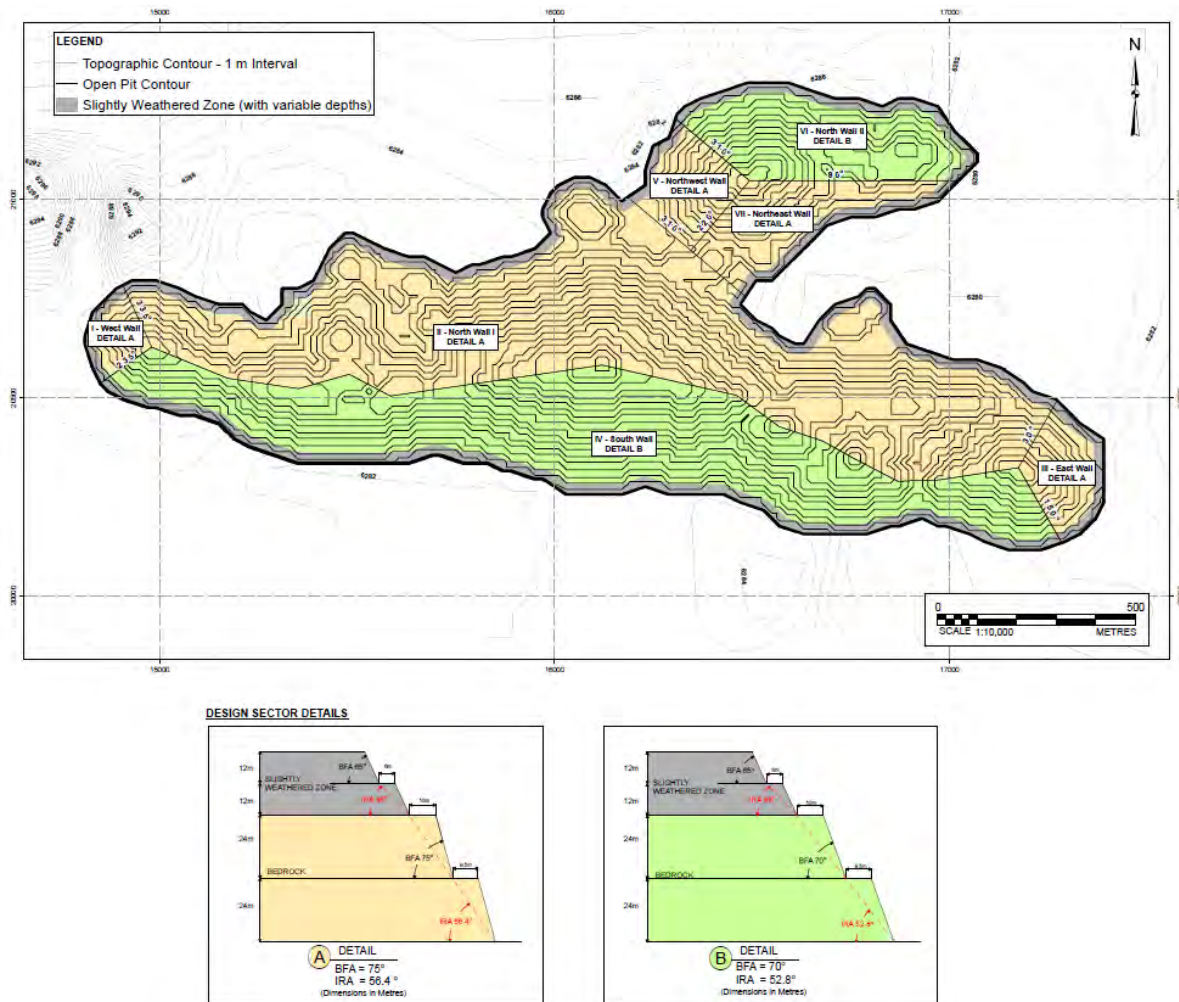
²For the final pit wall, Golder recommends a BFA of 70° until it can be demonstrated in the field that a different BFA can be excavated. Detour may try configuration with BFA = 75° in the interim slope.

³This sector provides an approximate outline of the area on the north wall in which several small drifts become exposed. The bench design is the same as Sector A but is delineated so that Detour can prepare and make local berm catchment increases depending upon the size and frequency of drifts that are encountered. These local berm catchment increases will be at the discretion of Detour to increase the safety of employees working near and beneath underground workings.

⁴This design must be applied for the areas where the Ultramafic 'Talc' (Talc Chlorite & Sunday Lake Deformation Zone) is estimated to intersect the pit walls. In addition, it should be applied to any historic stopes encountered within the south wall; these generally occur immediately north of Sector F. Identification of areas of stoping is to be complete prior to blasting benches which expose backfilled underground openings.



Figure 16-2: West Detour and North Pits - Pit Slope Recommendations



Note: Figure prepared by Detour Gold, 2018.

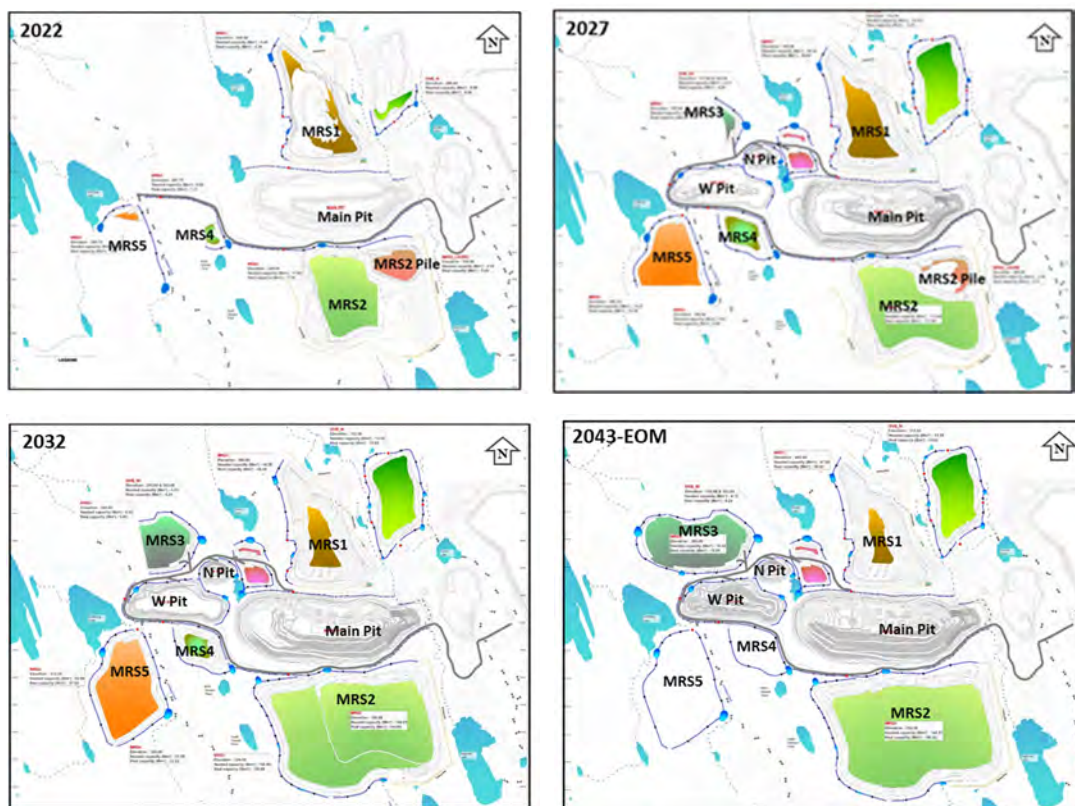
16.3 Hydrological Considerations

The mine water management plan is matched to the mine development strategy. It accounts for a pit dewatering system consisting of pump stations, pit sumps and old underground workings (used as additional water storage capacity to manage water inflows).

Water management infrastructure includes non-contact water diversion structures and water retention ponds, appropriately sized based on hydrological/hydrogeological modeling and the changes in mining activity and stockpiling over the LOM.

Figure 16-4 shows the changes in the water management structures in relation to the operations at four time snapshots.

Figure 16-3: Mine Water Management Systems



Note: Figure prepared by Kirkland Lake Gold, 2020. In these figures, EOM = end of mine life; MRS =mine residue storage; thick grey line is haulage road locations.

16.4 Open Pit Designs

16.4.1 Design Constraints

The design of each one of the three final pits (Detour Lake, West Detour and North Pit) is guided by the respective optimized shells. The final pit design incorporates the geotechnical parameters prescribed by Golder (Golder 2019, 2020).

The Detour Lake pit design incorporates a double ramp access for most of the LOM. The final ramp and principal access will be located in the north wall. The West Detour and North Pit were designed using a single ramp access.

All ramps are designed to accommodate the safe operation of 795CAT super class trucks. Typical road width is 33 m with a total length of 40 m to allow for safety berm and drainage. Ramp widths are adjusted at the bottom of the pit to a one-way lane. Other design parameters include a ramp slope (10%), minimum curve radius (39 m) and construction constraints (super elevation, crowning).

16.4.2 Pit Phases

The phase design process accounted for the deposit geometry and spatial value/grade/quality distribution, operational conditions, haulage access/congestion over time, equipment dimensions and geotechnical considerations. The nested shells obtained during the pit optimization exercise were also used during the design process to prioritize higher-value ore and lower stripping ratio areas. Equipment operational dimensions defined the minimum widths for phase design. In general, a minimum of 150 m width was targeted during the design process.

There are a total of nine phases designed for the LOM: five for the Detour Lake Main Pit, three for West Detour and one for North Pit. These are shown in Figure 16-4.

16.4.3 Pit Sizes

The final pit dimensions for the Detour Lake Main Pit, West Detour Pit and North Pit are provided in Table 16-2.

A plan view of the Detour Main Pit final pit design is displayed in Figure 16-5. A plan view of the West Detour Pit and North Pit designs is displayed in Figure 16-6.

16.5 Overburden and Pre-Stripping

Bedrock at both Detour Lake and West Detour is overlain by overburden composed of layers of muskeg, till, gravel, and sand. These overburden layers may be as thick as 40 m. At the start of each mining phase, this material must be stripped prior to the drilling and blasting of rock material. Depending on the material quality, weather and moisture content, this overburden material is typically 'free-digging' and does not require drilling and blasting. A portion of the till material (subject to quality control specifications) is stockpiled and used for tailings management area (TMA) construction purposes. The remaining overburden is stockpiled either in the main overburden stockpile or within designated areas of the WRSFs. A portion of this material will be rehandled for the reclamation of various waste rock stockpiles and/or TMA cells. Whenever possible, this overburden is directly placed for the progressive reclamation of ultimate WRSF slopes.

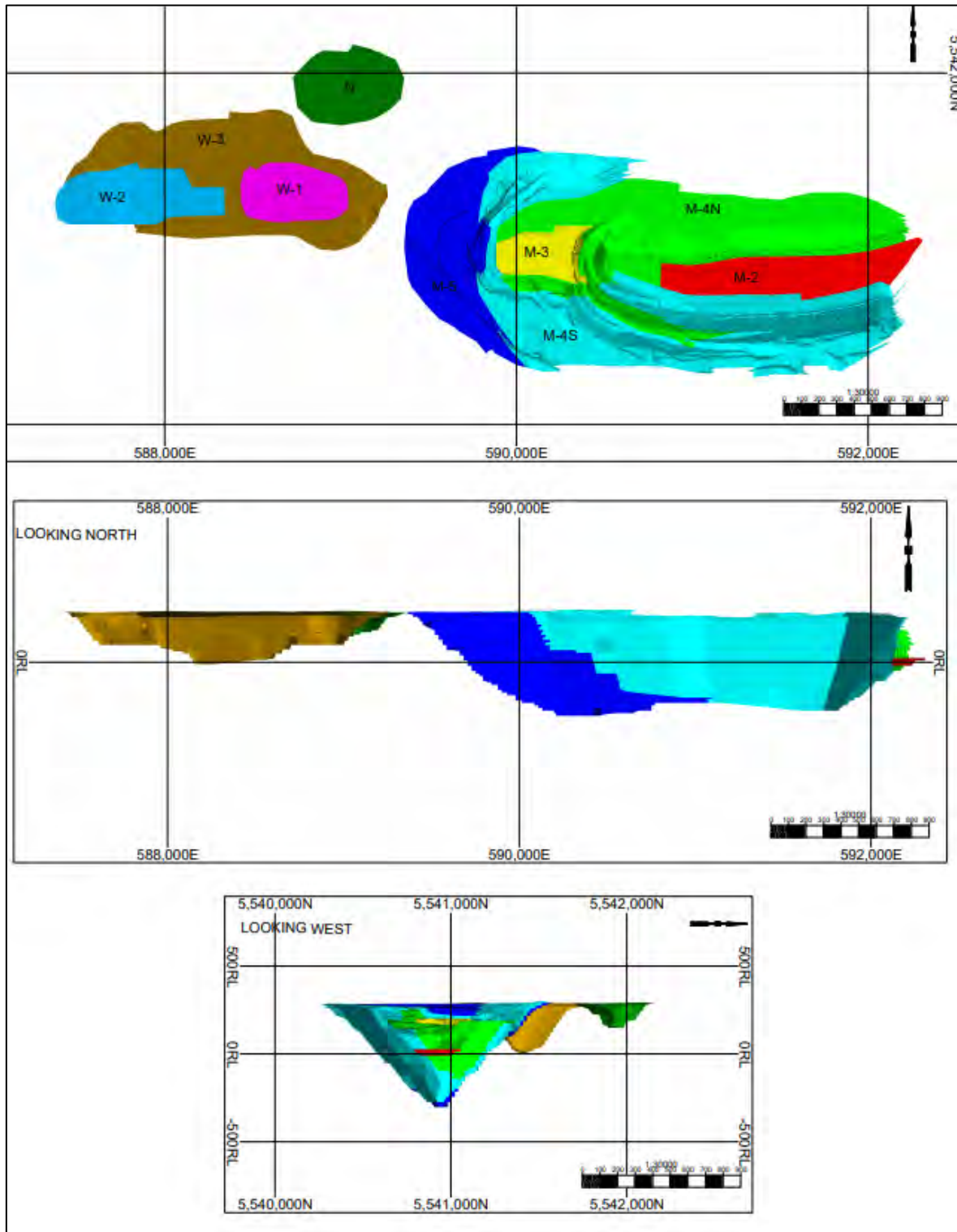
16.6 Stockpile and Waste Rock Storage Facilities

16.6.1 Strategy

Both WRSF and stockpile strategies are in agreement with the permitting strategy for the West Detour pit; and respect related environmental constraints. Currently the mine has two WRSFs (MRS1 and MRS2), one ore stockpile (ROMPAD) and one overburden/topsoil stockpile for mine reclamation purposes (OVB1). The mine plan accounts for three additional ore stockpiles (MRS4, MR5 and a temporary stockpile within the MRS2 WRSF footprint), three new WRSFs (MRS3, MRS2-extension and Inpit) and one new overburden/topsoil stockpile (West Detour Overburden stock).



Figure 16-4: LOM Pit Phases



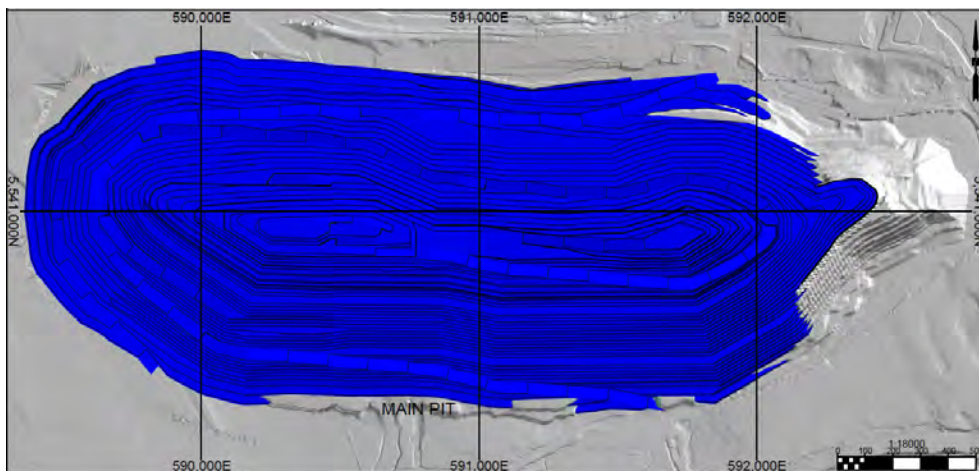
Note: Figure prepared by Kirkland Lake Gold, 2020.



Table 16-2: Pit Final Dimensions

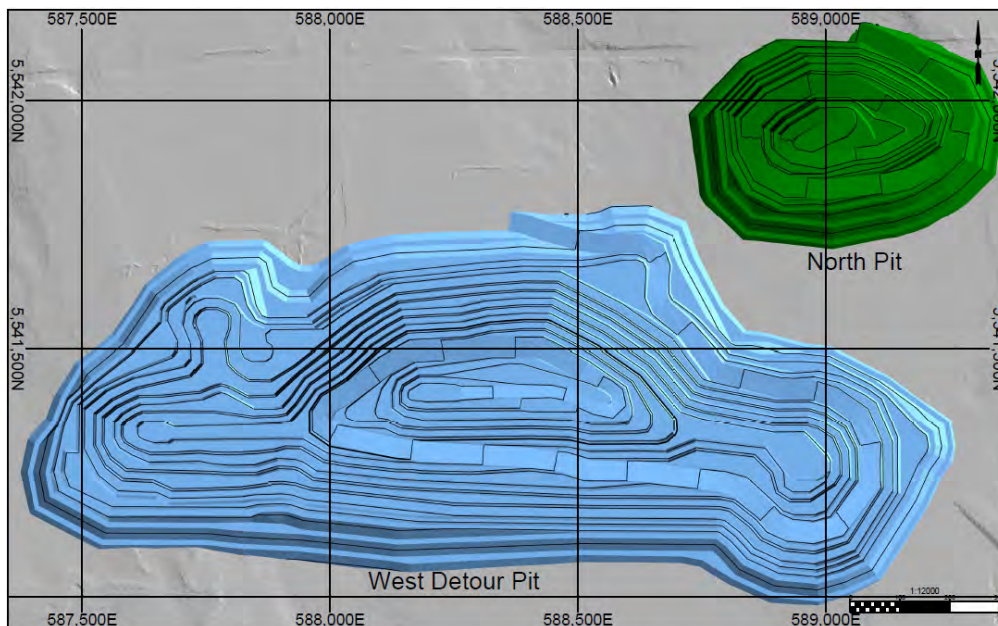
	Unit	Detour Lake Main Pit	West Detour Pit	North Pit
Width	m	1,310	810	460
Length	m	3,070	1,890	640
Depth	m	606	302	144

Figure 16-5: Detour Lake Ultimate Pit Design – Plan View



Note: Figure prepared by Kirkland Lake Gold, 2020.

Figure 16-6: West Detour and North Pit Ultimate Pit Design – Plan View



Note: Figure prepared by Kirkland Lake Gold, 2020.

Figure 16-7 shows the ex-pit WRSF locations. The in-pit WRSF is shown in Figure 16-8.

The waste material is classified as non-acid-generating (NAG), potentially acid-generating (PAG), overburden or topsoil. All PAG waste is routed to MRS1 or MRS3. NAG and overburden material not suitable for reclamation is routed to MRS2, MRS2-extension or used as construction material for the tailings cells.

The stockpile strategy has the objective of maximizing discounted cash flow by the adoption of an optimized cut-off grade strategy constrained by the available stockpile capacity. MRS4 and MRS5 are long-term stockpiles that will only be reclaimed at the end of the LOM, after active mining has ceased. The ore routed to the long-term stockpiles represents material that has to be mined (within final pit limits) and that generates positive cash-flow at the end of the mine operation.

The ROM pad and MRS2 temporary stockpile will receive material that will be reclaimed during mining operations. The MRS2 temporary stock is planned to be fully reclaimed by 2028 and the area used for waste deposition.

16.6.2 Design Criteria

WRSFs are designed accounting for geotechnical considerations, reclamation requirements, environmental and operational constraints and the tonnage and sequence of deposition. Table 16-3 summarizes the WRSF design parameters.

Stockpiles are designed accounting for geotechnical considerations, environmental and operational constraints and the tonnage and sequence of deposition. Table 16-4 summarizes the stockpile design parameters.

16.7 Mining Operations

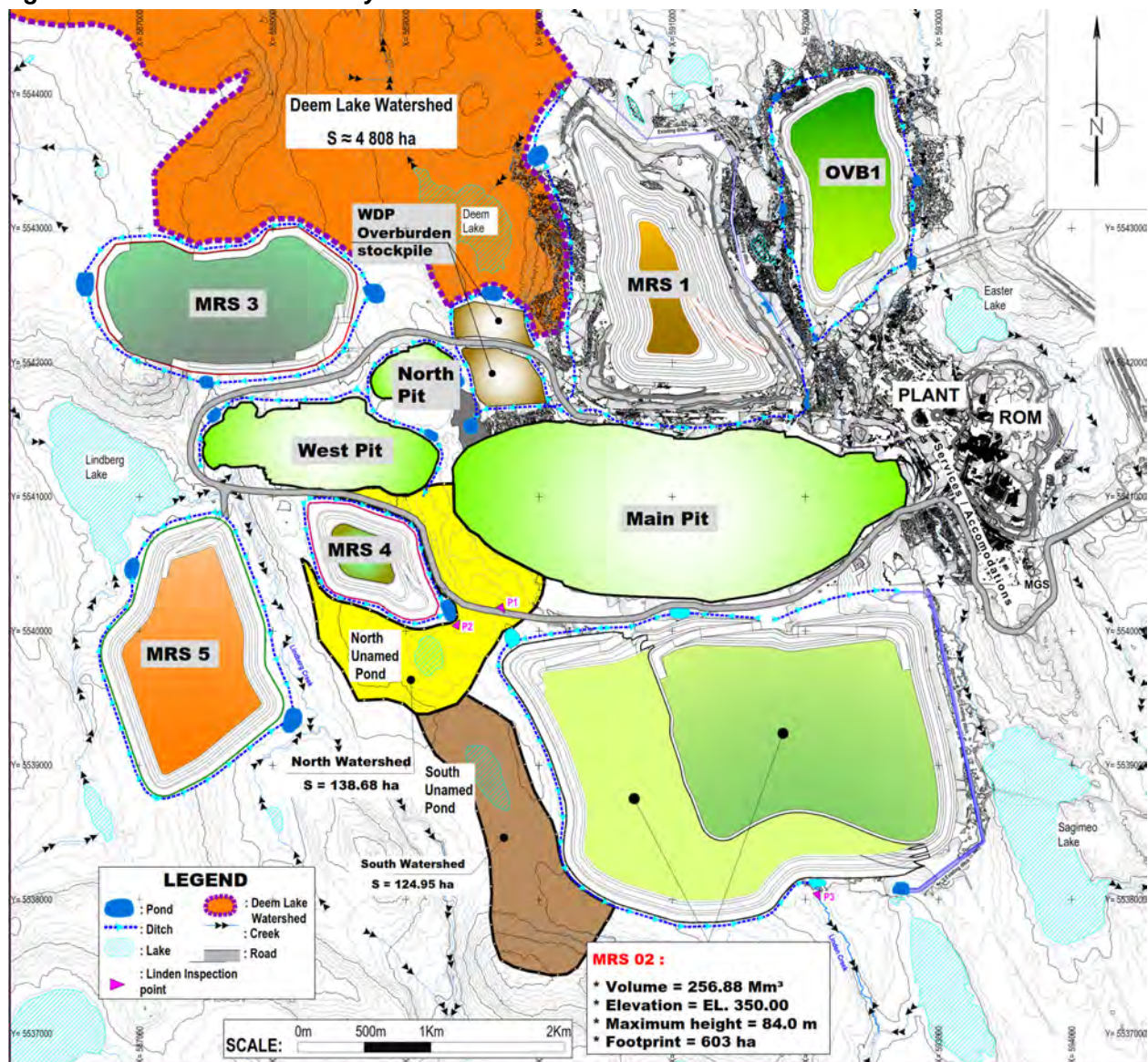
The Detour Lake Mine uses conventional truck-shovel open pit mining. Excluding the muskeg, overburden/till top layer, all material must be blasted. Pioneering drilling and blasting is required in the overburden/rock contact. Additionally, during winter months free digging of overburden material is not possible due to frost. The mine operation also requires the management of old underground workings.

Underground workings records are considered of good quality. The mine has been operating in historical underground working areas for the past years; the reconciliation of historical recordings and field observation of these workings is very good. The assumption that stopes were backfilled using sand/rock filled has also been confirmed. There are procedures in place to ensure safe operations in these areas. The procedures define zones classified by the risk of ground instability.

The Detour Lake Mine has used a 12 m bench-height since operations commenced. A 6 m sub-bench was used to mine the areas requiring pioneering to improve operational conditions related to boulders and pinnacles of bedrock.



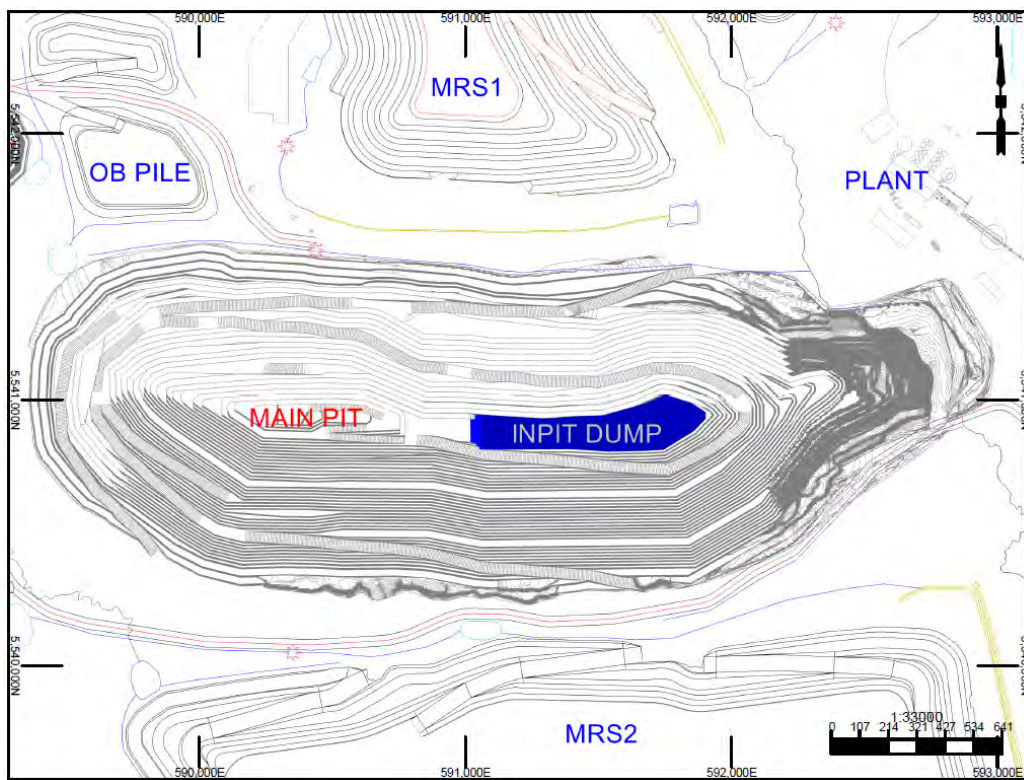
Figure 16-7: Site and WRSF Layout



Note: Figure prepared by Kirkland Lake Gold, 2020.



Figure 16-8: Inpit WRSF Layout



Note: Figure prepared by Kirkland Lake Gold, 2020.

Table 16-3: WRSF Design Parameters

	Units	MRS1	MRS2	MRS3	Inpit
Capacity	Mm ³	50,62	256,88	18,09	4.46
Elevation	m	405	350	305	-204.5
Maximum height	m	110,5	84	19	72.5
Footprint	ha	161	603	164,6	12.07
Bench face angle	°	37	37	37	36
Bench height	m	15	30	15	14.5
Catchbench	m	26	20	26	26
Overall slope angle	°	18	27	18	18

Starting in mid-2020 the mine transitioned to a 14.5 m bench height for areas to be primarily mined by rope shovels and to 7.25 m benches in areas to be mined using hydraulic shovels. The revised mine design has led to improvements in shovel productivities.

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

16.7.1 Ore Mining and Stockpiles

Mineralized zones previously delineated by core drilling are infilled using RC drilling, which is typically performed well ahead of production to decouple this step from the mining phase. The additional information is used to generate a short-term grade control model. Ore polygons based on different grade bins and material types are generated based on the grade control model. Blast movement technology is used to incorporate and adjust ore polygons for horizontal movement during blasting. The moved polygons limits are marked in the field to guide the excavation.

Whenever possible, mined ore is delivered directly to the primary crusher in order to avoid unnecessary rehandling. When the mined ore tonnage exceeds the operating capacity of the crusher, the ore is placed on one of the ROM stockpiles for later mill feed.

The ROM stockpiles are located in close proximity to the primary crusher to allow for efficient feeding into the plant. Ore in ROM stockpiles is segregated into piles consisting of similar grade material to allow for controlled feeding as required. The ROM stockpiles provide additional buffering capacity to ensure that crusher feed is maximized while also limiting excessive tramming of loading equipment between ore and waste areas in the pit.

16.7.2 Waste Mining

Waste mining is generally allocated to the rope shovel fleet. The grade control process also delineates waste into PAG or NAG material. PAG material must be routed to the MRS3 or MRS1 WRSFs.

Overburden material is generally mined by the hydraulic shovels.

16.8 Mine Production Plan

The vertical advancement rates assumed in the mine plan consider the spatial distribution of the mineralization, proposed development strategy, presence of underground workings and bench mining. The plan assumes a general limit of 6–8 benches per year in large development areas (waste and ore bulk mining) and 3–4 bench per year when mining areas that are primarily ore.

Table 16-4: Stockpile Design Parameters

	Temporary MRS2	MRS4	MRS5
Capacity (Mm ³)	8.4	11.53	58.23
Maximum height (m)	46.5	41.75	46
Footprint (ha)	54.2	57.2	188
Bench face angle (°)	37	37	37
Bench height (m)	8	15	15
Catchbench width (m)	14	26	26
Overall slope angle (°)	18	18	18

Shovel area requirements are also analyzed; ensuring the plan allows for the required space to operate the shovels efficiently. Ramp material flow limits and congestion analysis are also incorporated into designs. A maximum of a 90 Mt per ramp limit is assumed.

A maximum of 30 Mt/a is planned for the West Detour pit due to the pit size. A maximum North Pit mining rate of 6 Mt per year is due to pit and equipment size.

The annual mine production plan is based on the current Mineral Reserve estimates and the forecast is presented in Table 16-5, inclusive of dilution and ore losses.

The forecast average annual gold production and tonnes mined per pit are illustrated in Figure 16-9 and Figure 16-10, respectively.

16.9 Drilling and Blasting

Drilling and blasting activities are performed by Kirkland Lake Gold personnel. Dyno Nobel is the explosives supplier.

Different objectives and geological/fractural information are considered when design the patterns and loading plans. Yields vary with the different objectives (wall control, fragmentation, higher fragmentation, reduction of overcasting material) and with areas in the pit.

16.10 Equipment

The primary drill fleet at Detour Lake consists of electric and diesel Epiroc PV 271s, SmartROC D65s and DM45s drill rigs. Production drilling is performed primarily but not exclusively by PV271s drill rigs. The D65 and DM45 drills are mostly used for trim, pre-split and secondary drilling. The DM45 is the primary drill rig used for underground collapse and probe drilling.

The primary loading fleet consists of 28 m³ CAT 6060 hydraulic shovels (operating primarily in ore) and 48 m³ CAT 7495 rope shovels (operating primarily in waste zones). The shovel size was matched with a fleet of 300-t CAT 795 trucks. This fleet combination requires 5.5 passes for a hydraulic shovel and three to four passes for a rope shovel to fill a truck.

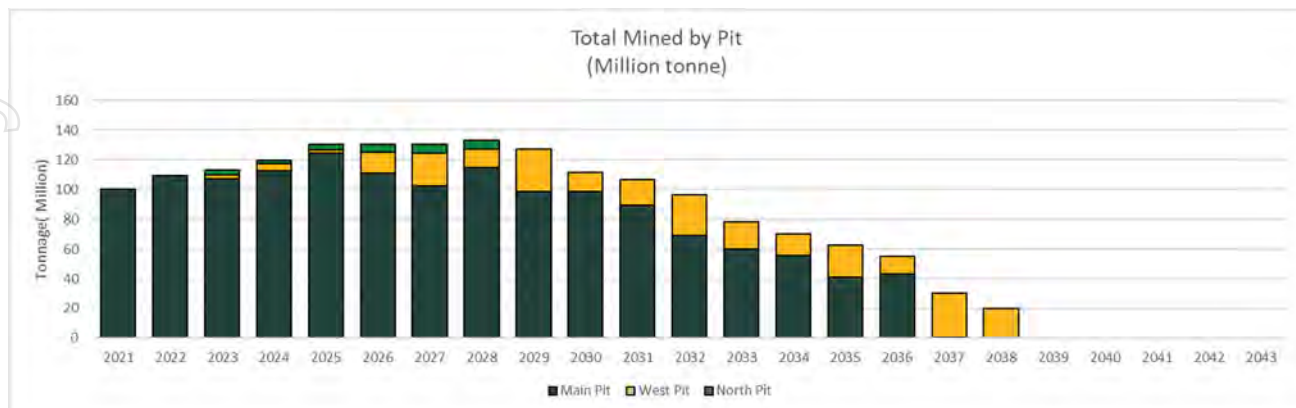
Table 16-5: Forecast Mine Production Plan

Year	Ore Mined* (Mt)	Waste Mined (Mt)	Strip Ratio (waste:ore)	Ore Processed (Mt)	Head Grade (g/t Au)	Gold Recovery (%)	Gold Production (koz)
2021	25.3	75.7	2.99	24.5	0.97	92.3	706.2
2022	40.1	69.0	1.72	25.5	0.93	92.1	705.3
2023	42.9	70.1	1.63	27.0	0.87	91.8	690.7
2024	45.6	74.0	1.62	27.8	0.87	91.7	715.5
2025	32.5	98.1	3.02	28.0	0.96	92.2	800.1
2026	27.6	102.7	3.72	28.0	0.89	92.1	735.4
2027	23.5	106.6	4.53	28.0	0.82	92.0	675.3
2028	24.5	108.4	4.43	28.0	0.63	90.8	517.8
2029	32.3	95.0	2.94	28.0	0.73	91.0	596.1
2030	35.2	76.1	2.16	28.0	0.85	91.6	701.3
2031	43.0	63.5	1.47	28.0	0.97	92.2	807.6
2032	45.0	51.3	1.14	28.0	1.10	92.7	916.3
2033	42.4	36.2	0.85	28.0	1.09	92.8	914.6
2034	37.8	32.6	0.86	28.0	1.08	92.8	901.8
2035	35.8	26.7	0.74	28.0	1.07	92.6	890.0
2036	32.8	22.5	0.68	28.0	1.07	92.6	896.3
2037	16.3	14.1	0.86	28.0	0.63	91.0	517.3
2038	11.2	8.9	0.79	28.0	0.67	91.2	548.3
2039				28.0	0.40	89.6	326.3
2040				28.0	0.47	90.0	379.4
2041				28.0	0.44	90.0	353.6
2042				16.2	0.44	90.0	204.4
Total	593.9	1,131.4	1.90	597.0	0.82	91.9	14,499.5

Note: * based on end-2020 forecast mine face position and stockpile balance.

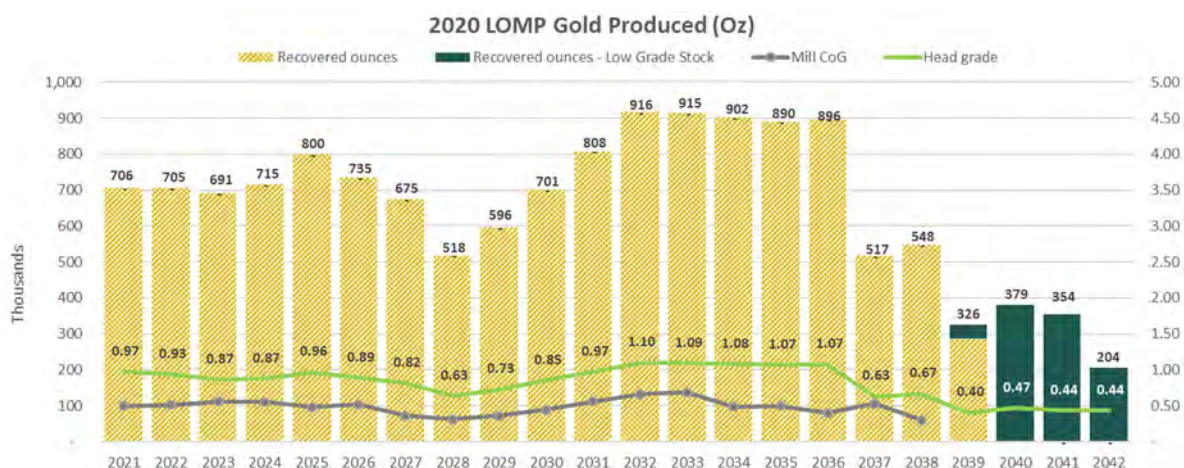


Figure 16-9: Tonnes Mined per Pit



Note: Figure prepared by Kirkland Lake Gold, 2020.

Figure 16-10: LOM Gold Production Profile



Note: Figure prepared by Kirkland Lake Gold, 2020.

The primary loading fleet is supplemented by CAT 6030 excavators and CAT 992 and CAT 993 front-end wheel loaders that are used for pit clean-up, ROM stockpile rehandle, TMA material rehandle and overburden stripping.

Overburden mining is primarily be allocated to CAT 6060s fleet for the Detour Lake Main Pit. The West Detour Pit and North Pit will primarily use the CAT 6030 fleet. The 6060s fleet will be the main loading unit when mining the West Detour pit. The CAT 6030s will be used for mining in the North Pit due to the better selectivity offered by the smaller bucket size and ability to mine in smaller benches.

The number of haul trucks required was calculated based on the rated payload of the trucks and the productivities computed from the cycle times. The appropriate mechanical

availability, utilization and operating delays were applied to determine the number of trucks required for production. Average annual haul profiles were created based on the mine production plan. Both CAT 795 and CAT 777 units are used.

The quantity of support equipment required was based on operational factors, such as the quantity of loading units to service and number of waste dumps, stockpiles and roads to maintain. The overall equipment requirements over the LOM are summarized in Table 16-6.

16.11 Maintenance and Repair Contract

Kirkland Lake Gold currently has a maintenance and repair contract (MARC) agreement with CAT dealer Toromont for the CAT 795 truck fleet. The MARC consists of a variable sliding-scale hourly cost and a fixed overhead fee.

16.12 Comments on Mining Methods

The QP notes the following.

- The mining operations use conventional open pit mining methods and equipment;
- Mining is conducted by the Owner at Detour Lake. Mining of West Detour and North Pit is also planned to be Owner operated;
- Five pit phases are planned over an 18-year mine life in the Detour Lake pit;
- Three pit phases are planned over a 16-year mine life in the West Detour pit;
- One pit phase is planned over a six-year mine life in the North Pit;
- There is a planned three-year initial operation phase for the West Detour and North pits to allow for the construction of all required infrastructure, and also limited pre-stripping.

Table 16-6: LOM Mining Equipment Fleet (maximum per period)

Item	Purpose	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Atlas Copco D65	Drills	4	4	3	4	4	3	3	3	3	3	3	3	2	2	2	2	1	1	0	0	0	0
Atlas Copco D-PV271		4	5	5	5	5	5	5	5	5	5	5	4	3	3	3	3	1	1	0	0	0	0
Atlas Copco E-PV271		4	4	5	5	6	6	6	6	6	5	5	5	4	4	4	3	2	1	0	0	0	0
Atlas Copco DM45		2	2	2	2	2	2	1	1	2	1	1	1	1	2	2	2	1	1	0	0	0	0
CAT 6030	Primary Loading Unit	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAT 6060FSD		3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
CAT 6060FSE		2	2	2	1	2	2	2	2	2	2	2	2	2	1	2	2	1	2	1	1	1	1
CAT 7495		2	2	2	3	3	3	3	3	3	3	3	3	2	2	1	1	1	0	0	0	0	0
CAT 777	Trucks	7	3	10	10	10	10	10	10	3	3	3	3	3	3	3	3	3	3	3	0	0	0
CAT 795		36	39	45	49	54	54	54	52	50	49	49	44	42	46	38	33	18	15	6	7	7	7
CAT 349	Excavators	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CAT 390		4	4	4	4	4	4	4	4	3	3	3	3	3	2	2	1	1	1	1	0	0	0
CAT 16M	Graders	2	2	2	2	3	3	3	3	2	2	2	2	2	2	1	1	1	1	0	0	0	0
CAT 24M		2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1
CAT D10	Dozer	6	10	11	11	13	13	13	13	12	11	11	11	10	9	8	7	6	5	1	1	1	1
CAT D11		4	3	3	3	3	3	3	3	3	3	3	3	2	1	1	1	0	0	0	0	0	0
CAT 844K		2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1
CAT 980K	Loaders	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
CAT 930		2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	0	0	0	0
CAT 992		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
CAT 993		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
740 Truck	Support	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1



17.0 Recovery Methods

17.1 Overview

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

The processing plant was designed to process ore at an average throughput of 55,000 t/d or 20 Mt/a, equivalent to milling rates of 2,500 t/h with operating time of 92% in a 24 hour day. While operating time has lagged at around 89%, the milling has far exceeded the design rate averaging 2,952 t/hr in 2020 for 23.06 Mt milled. On at least 70 occasions in 2020, a 74 kt milled per day rate was achieved. Table 17-1 shows the production rates from 2017–2020.

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

Various initiatives have been developed to bring the plant to the 28 Mt/a throughput rate. Those initiatives are:

- Improved fragmentation;
- Improved primary crusher choke feeding;
- Secondary crusher screens;
- Curved pulp lifters;
- SAG mill speed increase;
- Permit to go over 75,000 t/d;
- Re-feed system after the secondary crushers;
- Pebble crusher variable speed drives;
- Ore blending;
- Increase plant operating time to 93%.

Table 17-1: Production Rates, 2016–2020

Item	Unit	2016	2017	2018	2019	2020
Operating time	%	86	86	84	87	89
Hourly production	tpoh	2740	2844	2796	2880	2952
Daily production	t/d	56792	58514	56594	60370	62857
Annual production	Mt	20.7	21.4	20.7	22.0	23.0

17.2 Flowsheet

A simplified process flowsheet is presented in Figure 17-1.

17.3 Plant Design

The processing plant was designed to process ore at an average throughput of 55,000 t/d or 20 Mt/a, equivalent to milling rates of 2,500 t/hr with operating time of 92% in a 24 hour day. Key equipment is summarized in Table 17-2.

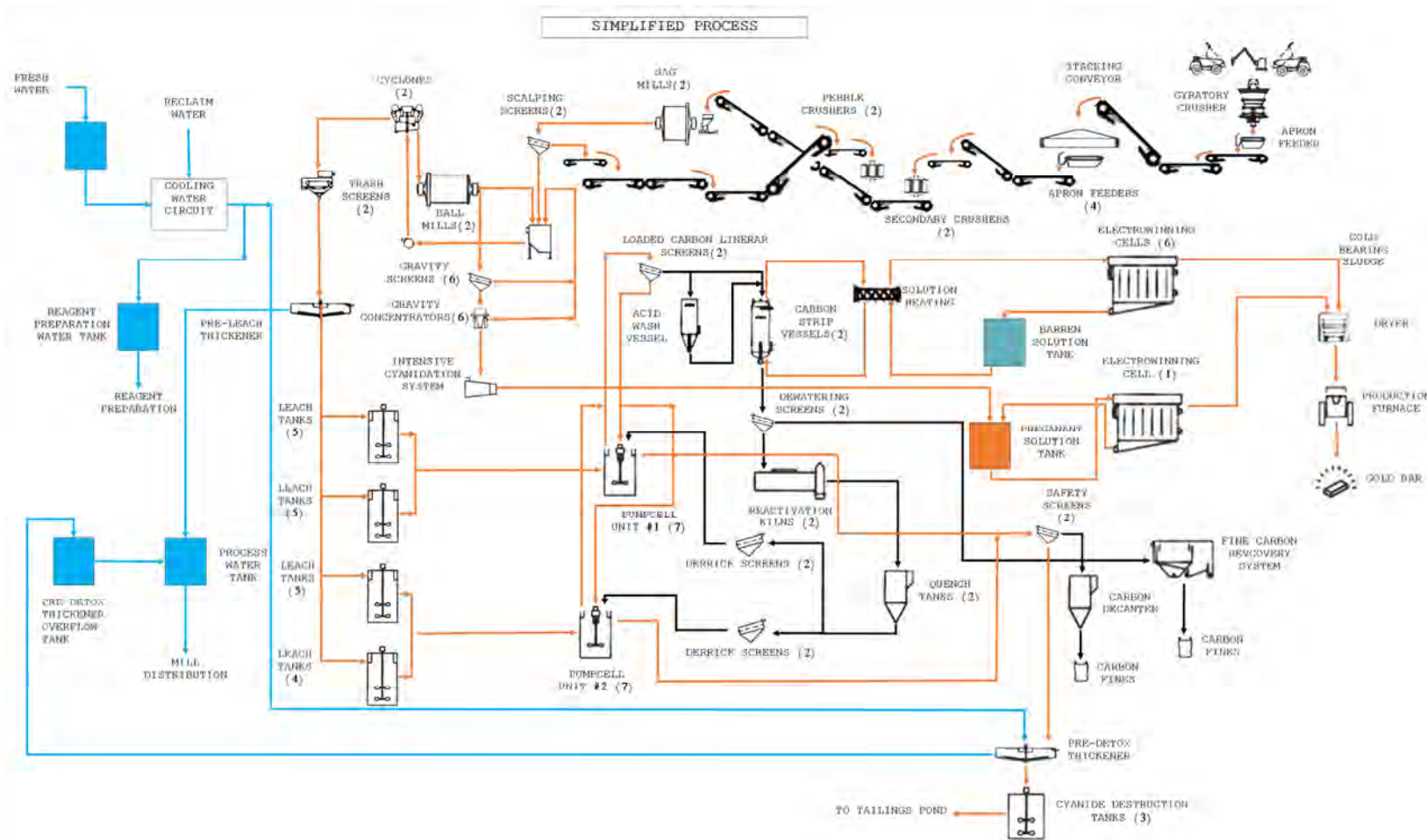
17.3.1 Crushing and Grinding

Crushing Circuit

The primary crushing system is a single stage, open circuit, primary gyratory crusher (60 x 113 inches). The crusher selection was based on a feed top size of 1,200 mm and a product P_{80} of 165 mm. The primary crusher has a capacity of 5,000 t/hr at a 138 mm close side setting. Assuming an 80% availability, the primary crusher has a capacity of 96,000 t/d. The live capacity of the feed and discharge hoppers of the gyratory crusher was designed for two truck loads each, assuming a nominal payload of 300 t. The crushed ore storage pile was designed with a live capacity corresponding to approximately 12 hours of crushing or 30,000 t, and an overall capacity (live plus dead) of 100,000 t.

Ore is reclaimed from the stockpile through two reclaim tunnels, one for each grinding line. Four apron feeders, two in each reclaim tunnel, discharge the crushed ore onto a belt conveyor that feeds a secondary cone crusher operated in open circuit. The secondary crusher is fed with the gyratory product with a P_{80} of 165 mm, and gives a product with a P_{80} of 50 mm. The secondary crusher product is conveyed directly to the SAG mill. The secondary crusher is equipped with a bypass chute to maintain high process plant availability. During maintenance of the secondary crusher, the bypass is put into place to feed the SAG mill directly from the stockpile.

Figure 17-1: Process Flowsheet



Note: Figure prepared by Kirkland Lake Gold, 2020.



Table 17-2: Key Design Parameters

Area	Item	Units	Note
Crushing and grinding	<i>Primary crusher</i>	<i>Number</i>	1
	Crusher type		Gyratory
	Crusher size	Inches	60 x 113
	Motor installed	kW	1,000
	Crusher capacity (instantaneous)	tpoh	5,485 @ OSS = 178; 6,160 @ OSS = 203
	Design throughput rate	tpoh	3,900
	Stockpile		
	Live capacity	H	12
	Live capacity (design)	t	30,000
	Live capacity (live + dead)	t	100,000
	<i>Secondary crushers</i>	<i>Number</i>	2
	Pre-crusher model		XL1100
	Motor installed	kW	745
	Design throughput rate	tpoh	1,550
	Pre-crusher final product size	mm	50
	<i>SAG mills</i>	<i>Number</i>	2
	Mill size	Metres	10.70 x 5.33 EGL
	Type of drive train		Twin Pinions
	Design recirculating load	%	35
	Transfer size – passing (P ₈₀)	µm	1,606
	Estimated power consumption (@ pinion)	kWh/t	9.4
	Selected motor (per mill)	kW	2 x 7500
	<i>Pebble crushers</i>	<i>Number</i>	2
	Pebble crusher model		XL1100
	Motor installed	kW	746
	Design throughput rate	tpoh	450
	Pre-crusher final product size	mm	13
	<i>Ball mills</i>	<i>Number</i>	2
	Mill size	metres	7.73 x 12.19 EGL
	Type of drive train		Twin Pinions
	Recirculating load	%	250
	Product size – passing (P ₈₀)	µm	95
	Estimated power consumption (@ pinion)	kWh/t	10.0
	Selected motor (per mill)	kW	2 x 7500

Area	Item	Units	Note
	<i>Hydrocyclone Clusters</i>	<i>Number</i>	2
	Number of hydrocyclones per cluster		10 operating + 2 spares
	Hydrocyclone diameter	metres	0.84 (33 inches)
	Hydrocyclone underflow density	%	70
	Operating pressure	kPa	83
Gravity	Number of gravity concentrators	Number	6
	Concentrator model		Falcon SB Concentrator Model SB5200-BSE
	Concentrator maximum capacity (each)	tpoh	400
	Intensive cyanidation reactor model		Gekko - ILR4000BA
Leaching and carbon-in-pulp circuit	<i>Leaching Circuit</i>		
	Average leach time	h	29
	Leach density	% solid	50
	Number of leach tanks		20
	Average volume per tank	m3	4,988
	<i>CIP circuit</i>		
	Type		Carrousel
	Number of carousel lines		2
	Number of tanks per lines		7
	Volume per tank	m3	330
	Design gold feed solution grade	mg/L	1.2
	Design carbon adsorption	g/t	3,550
	Carbon content per CIP tank	t	20
Stripping, electrowinning, and refining	Acid wash vessels	Number	1
	Acid wash vessel capacity	t	10
	Acid type used		Hydrochloric acid
	Elution circuit type		Zadra high pressure
	Carbon stripping vessels	Number	2
	Carbon stripping vessel capacity (each)	t	10
	Barren solution tank capacity	m ³	120
	ILR pregnant solution tank capacity	m ³	13
	Carbon reactivation kilns	Number	2
	Reactivation kiln capacity	t/d	10

Area	Item	Units	Note
	Kiln type/heat source		Gas fired/propane
	Quench tanks	Number	2
	Quench tank capacity (each)	t	12
	Carbon attrition tanks	Number	1
	Carbon attrition tank capacity	t	1
	Electrowinning cells	Number	6 + 1
	Electrowinning cell volume (each)	m ³	3.54
	Induction furnaces	Number	1
Thickening	Pre-leach thickener solids feed rate (design)	tpoh	2,569
	Pre-leach thickener slurry feed rate (design)	m ³ /h	7,218
	Pre-leach thickener sizing criteria	tpoh/m ²	1.18
	Pre-leach thickener selected diameter	metre	55
	Pre-detox thickener solids feed rate (design)	tpoh	2,569
	Pre-detox thickener slurry feed rate (design)	m ³ /h	5,283
	Pre-detox thickener sizing criteria	tpoh/m ²	1.16
	Pre-detox thickener selected diameter	metre	55
Tailings	Type of cyanide destruction (CND) system		SO ₂ /air
	CND tanks	Number	3
	CND tank size (each)	m	14.4 m diameter by 17.0 m high
	CND tank volume (each)	m ³	2,775

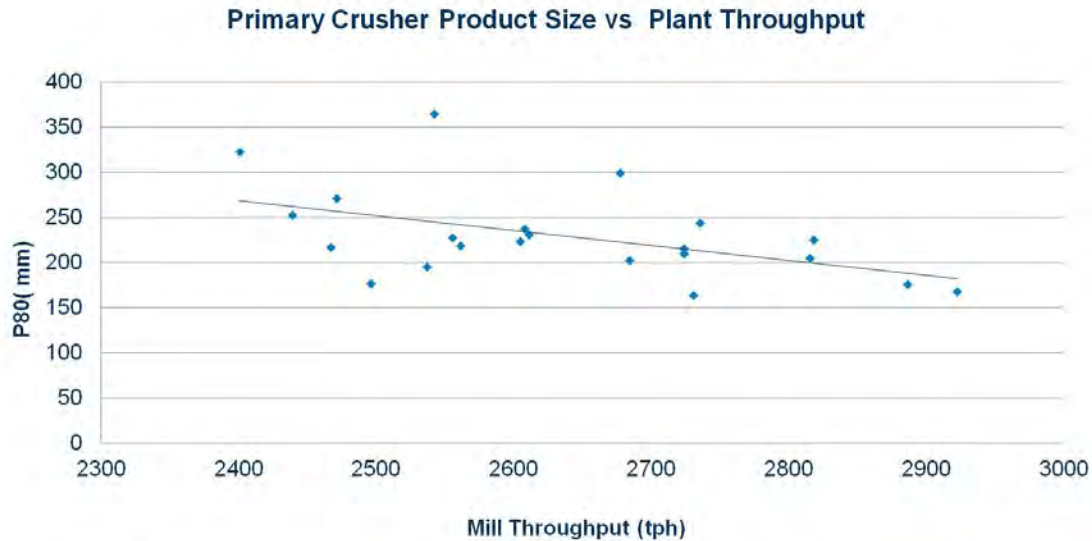
Crusher Improvement Initiatives

The primary crusher is a key area where initiatives are planned to generate a finer product that will translate into a higher plant throughput.

The impact of fragmentation on throughput has been well documented and has a very high impact on throughput. The relationship shown in Figure 17-2 was derived from operating data.



Figure 17-2: Primary Crusher Product Size versus Plant Throughput



Note: Figure prepared by Kirkland Lake Gold, 2020.

It has been established that each 50 mm reduction in the P80 equals about a 300 t/hr increase in plant throughput. In 2019, the Detour Lake Mine started a drill-and-blast optimization project that has resulted in higher throughput rates and better operational conditions. The initiative is ongoing as the mine aims to further optimize the process.

The choke feeding of the primary crusher is another key element to increase the plant throughput milling rates. It has been well established that the longer a crusher stays full, the finer the product will be (choke feeding). A unit of measure was created to measure choke feeding which is the Tons/#Empty events. For example, if 50,000 t was crushed and the crusher went empty 100 times, the Ton/#Empty event would be 500.

Figure 17-3 and Table 17-3 highlight that if the average could be increased from 600 t/empty event to 800 t/empty event, the throughput rates would increase by 45 t/hr.

The primary crusher choke feeding can be improved. The avenues to do this are to improve dispatching of trucks, better fragmentation to avoid bridging of the crusher, an excavator dedicated to the primary crusher re-feed, and improved rock breaker availability and performance.

One of the most important improvements associated with increases in the milling rate will be the addition of screens over the secondary crushers. The first consideration for efficient secondary crushing is to have the correct feed preparation. A secondary cone crusher achieves its best work when fines smaller than the desired crusher product are removed from the feed. This was not done during the initial design, and as a result, the secondary crushers receive direct feed from the primary crusher with all the fines still in the feed.

Figure 17-3: Throughput versus Choke Feed Events

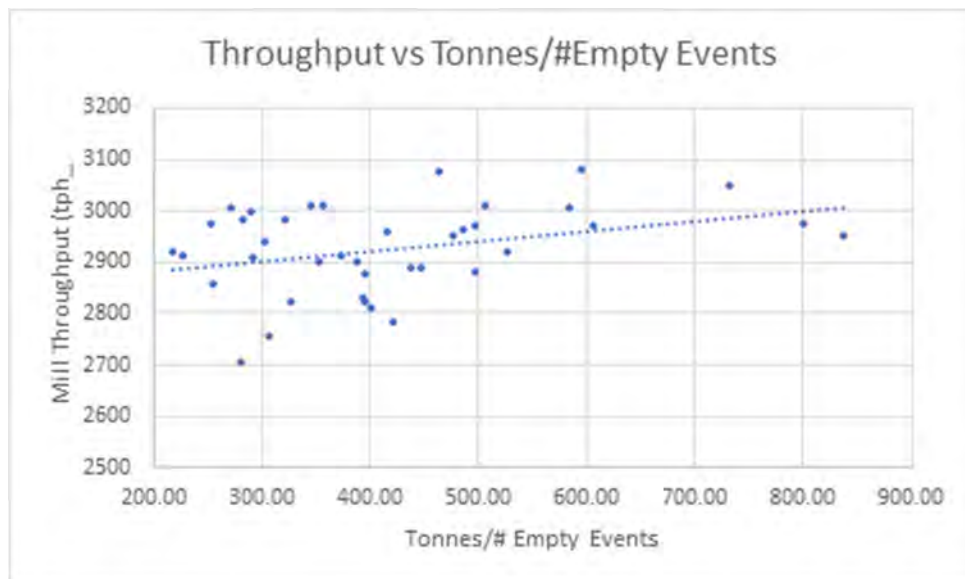


Table 17-3: Choke Feed Events, 2019–2021 (year to date)

Year	Tonnes Crushed/Empty Events
2019	318
2020	599
2021 (year to date)	589

By removing these fines prior to crushing, a more efficient head movement can be achieved as the coarse particles are easily broken into smaller particles due to the voids created in the crushing chamber. Fines will therefore take power and will cut the capacity of the crusher.

Screens can be retrofitted over the secondary crushers and are part of the capital plan to increase the plant throughput in 2021. The benefit to the throughput was confirmed by BBA with modeling of the 2018 grinding circuit surveys using JKSimMet software.

Grinding Circuit

The SAG mill operates in closed circuit with a pebble crusher while the ball mill operates in closed circuit with hydrocyclones.

The design circulating load from the cyclones to the ball mill is 250% of the SAG mill new feed. The pebble crushing circuit with a design discharge P_{80} of 13 mm processes the equivalent of up to 25% of the fresh feed.

Around 15% of the cyclone feed material is sent to the gravity recovery circuit. Six gravity concentrators with 48 inch bowls were selected (three per grinding line supporting a strategy



of two units in operation at all time). A batch-intensive cyanidation system is used to process the gravity concentrate. The extraction performance of gold from the gravity concentrate by the intensive cyanidation system is 99%. The pregnant solution is pumped to a tank in the gold room followed by electrowinning in a dedicated cell.

Curved Pulp Lifters

As part of the initiatives to increase the milling rates, the SAG mill pulp lifters will be converted to curved from their current radial configuration. Evidence of severe backflow has been seen on the pulp lifters indicating the pulp lifters are not empty when they go back inside the charge.

The other benefit the pulp lifters will enable is to run the mill faster. With the current radial pulp lifters, if the mill is sped up, the discharge rate drops as there is insufficient time for the pulp lifters to be emptied. If the speed is dropped, the mill throughput drops significantly as the Detour Lake Main ore is very hard and needs high speeds and impacts to break. The opposite is believed to be true as if the mill is sped up more than currently, it will increase the efficiency and thus the throughput.

Air Permit Limits on Throughput

The mill was constrained by an air permit limiting the throughput to 75,000 t/d. In 2020, there were 70 events where the air permit resulted in lower throughput.

On January 13 2020, this air limit was lifted to an annual tonnage of 32 Mt. The removal of this limit will definitely have a positive impact on the daily throughput

Re-Feed System After the Secondary Crushers

Every time a crusher goes down, whether the crusher is primary, secondary, pebble, the plant throughput is impacted. The goal with the re-feed system is to generate 750 kt of -2.5" feed annually, which is the equivalent size of the secondary crusher discharge. This material would be re-fed onto the SAG mill feed conveyor during of crusher downtime events.

Pebble Crusher Variable Speed Drives

By its nature, the rate of pebbles a SAG mill generates is not uniform. The rate is influenced by the ore feed size, mill speed and load inside the mill. The result is that the power of the pebble crusher cannot be maximized due to the variation in feed to the pebble crushers. The crusher is gapped so it can receive any surge in pebbles. The average power is therefore maintained around 450 kW while the motor is rated for 750 kW. The pebble crusher is rarely choke fed.

By installing a variable speed drive (VFD) on the pebble crusher motors, the speed can be increased and decreased to maintain a set-point of 550 kW for power draw. This will enable

the crusher to be choke fed and reduce the particle size coming out of the crusher. With a reduced particle size, the SAG mill throughput will increase.

For each kW of pebble crusher power, the SAG milling rate will increase by about 0.4 t/hr.

Ore Blending

Ore blending is an avenue that the processing plant will use to optimize milling rates. With the open pit supplying more ore than what the mill can process for the next five years, talc ore can be stockpiled and processed opportunistically. That means that when the ore from the pit is soft, talc ore can be stockpiled and reclaimed when the ore will be harder.

The same strategy can be applied to ore that is blasted aiming for a high fragmentation rate.

Increase Plant Operating Time to 93%

The operating time for the processing plant is calculated when the ore is on the belt feeding the SAG mills. Operating time is typically 1–2% lower than the mechanical/electrical availability. Although plant operating time has improved since start-up, the design rate of 92% has not yet been achieved over an annual basis, instead averaging around 88–89%.

The root causes resulting in lower operating time were identified and corrective measures are in the process of being engineered such that implementation will increase the availability to 93% which is the industry standard for this type of milling circuit.

17.3.2 Leach and Carbon-in-Pulp

The gold recovery circuit selected was a “leach circuit followed by a CIP” circuit. The designed retention time for leaching is 29 hours. The leach feed size was designed at a P_{80} of 95 μm . Four new leach tanks are planned to be built to support the increase in throughput to 28 Mt/a.

The CIP design selected uses a carousel type system with an average design retention time of 80 minutes in this circuit.

Upgrades to the pumpcells will support the 28 Mt/a throughput rate. The VSD and motors for the CIP tails pumps will be upgraded to 500 hp from 350 hp.

The current adsorption profile and modeling support the planned increase in throughput rate.

17.3.3 Acid Wash, Stripping, Electrowinning, and Refining

The stripping system uses a modified version (i.e., on-line electrowinning and no pregnant solution tank) of the high-pressure Zadra process to recover the gold from the loaded carbon.

The circuit incorporates an acid wash stage and is designed to handle up to 10 t of carbon per day. The acid wash stage is not currently used and will be converted into a plastic

removal vessel. The build up of calcium is not sufficient to warrant the use of the acid wash vessel.

The stripping circuit is designed to handle up to 10 t of carbon per stripping cycle (approximately 8–10 hours); 100% of the carbon is regenerated in two regeneration kilns designed to handle up to 20 t of carbon per day.

The electrowinning is done “in-line” with the stripping circuit. The flow of pregnant solution is split between three rows of two electrowinning cells. One dedicated electrowinning cell handles the pregnant solution from the ILR tank.

The refining equipment is designed to handle the gold from the stripping circuit and from the gravity recovery system. The electrowinning sludge is filtered, dried and mixed with fluxes, before being smelted using induction furnaces.

The current elution capacity is estimated to be 2.5 strips of 10 t per day. In 2020, 1.75 strips per day were completed. There is sufficient capacity to cover the increased throughput for the LOM.

17.3.4 Thickening

The feed to the leach circuit is maintained at a density of 50–55% solids by weight using one high rate thickener. The overflow of the pre-leach thickener is recycled to the process water tank. The pre-detox thickener is used to thicken the leach tails slurry to 55–60% solids and the overflow is recycled to the process water circuit.

The thickener capacity is over 90 kt/d and can support the increase throughput without any modifications. Current flocculent consumption is low at 10 g/t.

17.3.5 Tailings

The underflow of the pre-detox thickener is diluted using reclaim water prior to cyanide destruction. The tailings slurry coming out of the cyanide destruction unit and is pumped into the tailings storage area via two parallel pipelines, each with a maximum flow of 2,500 m³/hr each; sufficient to support the increase in throughput to 28 Mt/dr. Some minor upgrades to motors and VFD may be needed when going to cell #3 of the TMA.

The selected cyanide destruction process is the Inco SO₂/air process. Liquid SO₂ is used with sodium metasilphite as a back up.

A fourth detox tank is planned to be installed to support the increase in plant throughput.

17.4 Energy, Water, and Process Materials Requirements

17.4.1 Power

Energy consumption is not expected to significantly increase as a result of the increased throughput rate. A lot of the initiatives to increase plant throughput are related to increases

in grinding efficiency with the same power. The increase in energy consumption is mostly related to the increase in run time.

The historical plant power consumption for the plant from 2018–2020 as:

- 2018: 680,198 MWh for 20.7 Mt, 0.033 MWh/t;
- 2019: 713,723 MWh for 22.0 Mt, 0.032 MWh/t;
- 2020: 710,252 MWh for 23.0 Mt, 0.031 MWh/t.

The LOM assumes that the 28.0 Mt/a throughput rate will use 731,000 MWh per year, which the plant electrical system is adequately designed to supply.

17.4.2 Water

A decant tower system is used to reclaim and pump water from the TMA back to the process plant to satisfy process water requirements. For Cell#2 a barge reclaim water system will be used. Reclaim water is piped to the process plant. Depending on the water balance in the TMA, water from the open pit and various collection ditches around the WRSFs can also be directed to the plant.

Make-up water for the reagent mixing is sourced from East Lake when required.

17.4.3 Consumables

Consumables used in the plant include:

- Steel balls for grinding media;
- Quicklime (CaO) for pH control;
- Sodium cyanide (NaCN) for gold dissolution and desorption;
- SO₂ and SMBS for cyanide destruction;
- Anti-scalant for process water and strip solution;
- Caustic for pH adjustment for the strip solution, cyanide mixing and ILR solution;
- Copper sulphate to start cyanide destruction reaction;
- Carbon for gold collection;
- Ore anti-freeze conditioner; added in winter.

18.0 Infrastructure

18.1 Overview

Surface infrastructure to support operations is in primarily in place, and includes:

- Three open pits: Detour Lake Main (in operation), West Detour and North Pit (to be constructed);
- Processing facilities: grinding and leaching facilities, along with management and engineering offices, change house, workshop, warehouse, and assay laboratory facilities;
- Mine facilities: management and engineering offices, change house, heavy mining vehicle and light vehicle workshops, wash bay, warehouse, explosives magazine, crusher, mine access gate house, return water pump house;
- Administration buildings: facilities for overall site management, safety inductions, and general and administrative functions;
- Accommodation camp;
- Four stockpiles: ROM pad, MRS4, MRS5 and the temporary MRS2;
- Four WRSFs: MRS1, MRS2, MRS3 and Inpit ;
- Three tailings storage facilities: cell 1, 2 and 3;
- Water management facilities: stormwater and water storage dams, diversions, culverts;
- Landfill facility.

A layout plan showing the facilities constructed to support mining operations is provided in Figure 18-1.

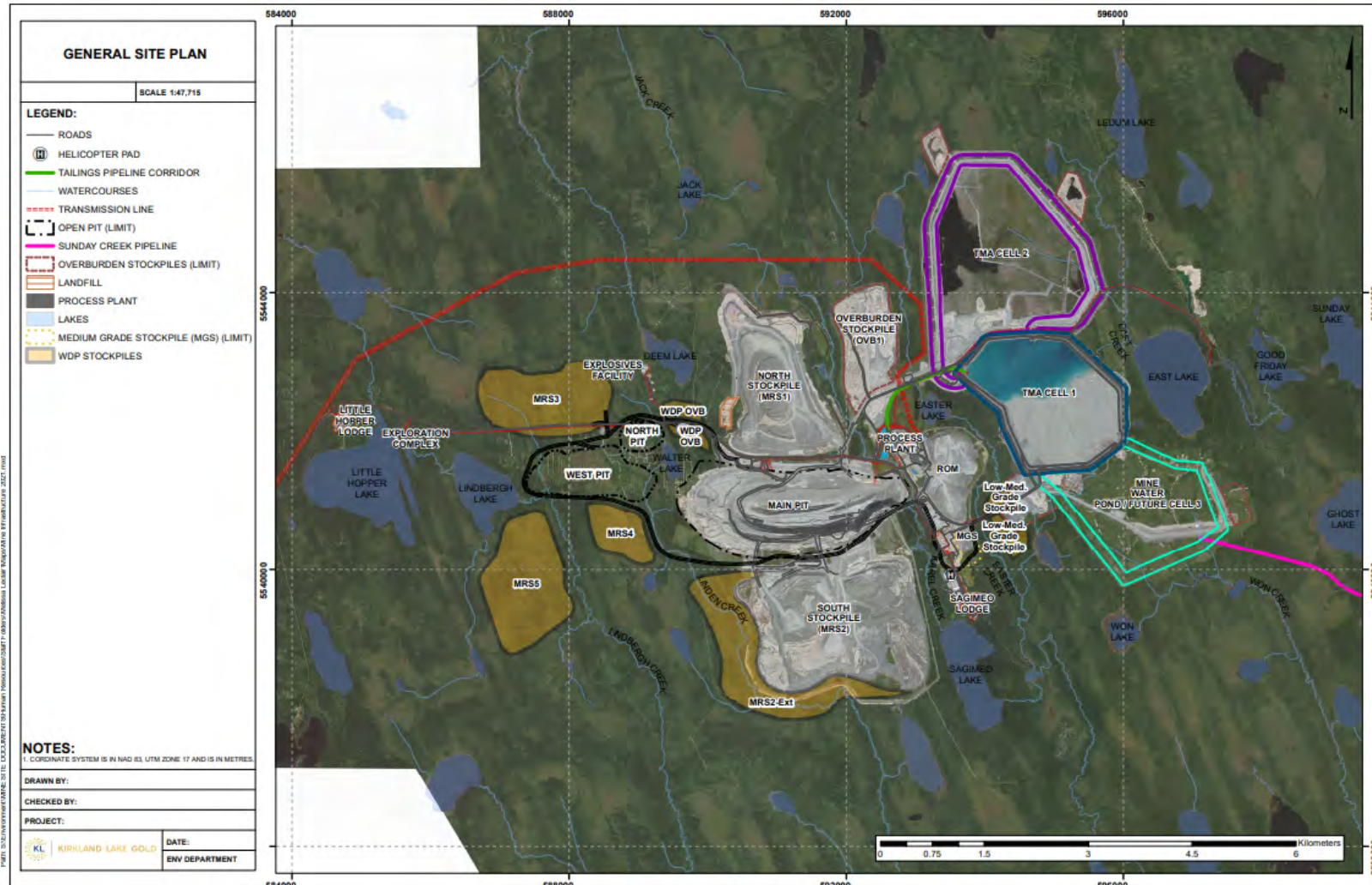
Projects were ongoing through 2020 which included construction of additional camp capacity, construction of an airfield and aerodrome, construction of an onsite assay laboratory, construction of additional mobile maintenance offices and shops, and construction of additional exploration facilities.

18.2 Road and Logistics

A discussion of the access routes was provided in Section 5.1.

Site access is provided through a guard/security house located at the entrance to the site on the main access road. Visitor car and truck parking bays are provided adjacent to the guard house. The guard house is equipped with radio and telephone communication and is manned continuously.

Figure 18-1: Infrastructure Layout Plan



Note: Figure prepared by Kirkland Lake Gold, 2021.

18.3 Stockpiles

Stockpiles are discussed in Section 16.6.

18.4 Tailings Management Area

TMA Cell 1 and Cell 2 are located approximately 2 km east–northeast of the Detour Lake Main open pit. TMA Cell 1 contains approximately 153 Mt of tailings. The facilities are discussed in Section 20.3.

18.5 Mine Site Built Infrastructure

18.5.1 Mine Service Facilities

The mine service facilities are sufficient to support maintenance of the current mining operations fleet. It is located approximately 1.2 km south of the processing plant. The largest floor space allocation is for the workshop and work-bays. The LOM plan includes capital for expanding the work-bays to accommodate a larger number of trucks.

An appropriately-sized truck wash facility was constructed adjacent to the mine service facilities building to allow for washing and cleaning of heavy equipment prior to maintenance taking place.

In proximity to the mine service facilities and truck wash buildings are a diesel and gasoline fuel storage and re-fueling station.

18.5.2 Process Plant

The processing plant comprises three main buildings (the primary crushing building, the secondary and pebble crushing building and the main process plant building). Additional process facilities are located adjacent to these buildings.

The primary crushing building is located approximately 450 m to the northeast of the eastern Detour Lake Main Pit limit. Adjacent to the primary crusher, a ROM stockpile was established to help manage the crusher downtime. The crusher building houses the gyratory crusher and the tail end of the stockpile feed conveyor. The crushed ore stockpile has a capacity of approximately 100,000 t. Under the stockpile, two reclaim tunnels were installed for the conveyors to recover the crushed material.

Each conveyor reclaims crushed ore from the stockpile to a secondary crusher located in the secondary and pebble crusher building. In this building, a conveyor collects both secondary and pebble secondary crusher undersize to convey the ore to the SAG mill. Both secondary crushers and pebble crushers are equipped with shuttle chutes and bypass chutes to enable maintenance of crushers without stopping a grinding line.

The main processing plant building houses the grinding, CIP, gravity and intensive cyanidation, reagents, stripping, electrowinning, refining areas, compressors as well as

tailings pumps. The leach tanks are located north of the main process building between the thickeners. The tanks are arranged in two sets of 10 tanks (four rows of five tanks) on a large containment concrete pad.

The process staff offices are located within the main processing plant. This office complex also houses a conference room, lunch room, change rooms, washrooms, documentation room and a metallurgical laboratory. The plant maintenance shops are located on the first and second floors of the main processing plant building on the south side of the grinding area.

18.5.3 Administration

Site administration facilities are incorporated within the mine service facilities, and include offices, warehouse, change rooms, and showers. In addition, the building also includes the emergency services area (an examination room, a treatment room and a covered garage houses the ambulance).

18.5.4 Explosives Plant

Dyno Nobel operates a bulk explosives plant approximately 3.5 km west of the processing plant facilities. The designed manufacturing capacity is sufficient to meet the mine's requirements.

18.6 Off-Site Built Infrastructure

Facilities in Cochrane include administration offices, a bus terminal with employee parking lot and security check-ins, four houses and an eight-unit apartment block. Kirkland Lake Gold has a shared services centre in Timmins that services the Detour Lake Mine.

SGS Minerals operates a full-service analytical laboratory in Cochrane in support of the Detour Lake Mine.

18.7 Camp and Accommodations

Workers are accommodated in two camps. The Little Hopper Lodge (previously referred to as the Permanent Camp) is located 7 km west of the mining operations in close proximity to Little Hopper Lake.

The Sagimeo Lodge is located just south of the mine services building. Accommodations are in the process of being expanded, and will have a total capacity of 1,447 persons.

18.8 Communications

A fibre optic link provides internet access and VOIP phone connectivity to the Detour Lake Mine and connects all facilities to the offices in Cochrane and Toronto. Voice and data are communicated by radio and wireless backbone where the use of fibre is not practical.

Satellite phones and copper-lines are used as emergency backup communication methods in the event of fibre optic service disruptions.

18.9 Water Management

The existing water management system was designed to minimize the amount of fresh water (non-contact water) required to operate the mine and process plant and to minimize discharge of treated contact water to the environment. Currently water management infrastructure is also designed to segregate and recycle water that has been in contact with process reagents (process water), this water is fully contained within the TMA in a closed loop and never discharged to the receiving environment.

Contact water from the open pit is captured in a collection of sumps and pumped through a network of piping to one of two sediment collection ponds on the surface. Water from old underground workings are also dewatered using a borehole and pumped into one of the pit sumps before being transferred to the surface collection ponds. Water in the sediment collection ponds is then either used to supplement water for the mill or transferred to the Mine Water Pond.

Stockpile runoff is managed using a series of collection ditches and ponds. Stockpiles are encompassed by ditches that gravity feed to ponds located at topographic lows. Runoff collected in these ponds is then pumped through a network of piping to one of the sediment ponds where it is either used to supplement water for the mill or transferred to the Mine Water Pond.

As indicated in Section 1.17.4 the mine water pond serves as a central water management facility (e.g., for open pit water and local runoff), and provides additional contingencies for storage and treatment, if needed. Additional details on water management and discharge considerations can be found in Section 20.4.

18.10 Water Supply

Potable water for the Little Hopper Lodge is obtained from Little Hopper Lake, adjacent to the lodge, and processed through a water purification plant. This is adequate for the Detour Lake's current and future needs.

Potable water for the Sagimeo Lodge, mine services facilities, site administration facility, and the processing plant is obtained from borehole wells close to the camp, and processed through a water purification plant.

Fresh water is pumped from East Lake. This water is primarily used in the processing plant for reagent mixing but is also used as wash water in the truck wash facility and water make-up for the fire water tank.

18.11 Power Supply

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

19.0 Market Studies and Contracts

19.1 Market Studies

No market studies are currently relevant as Detour Lake is an operating mine producing a readily-saleable commodity in the form of doré. Doré is sent via secure transportation to a refinery for further refining.

Kirkland Lake Gold sells its gold production into the market at spot prices or on a forward sales basis. The proceeds from these sales are credited to Kirkland Lake Gold's account upon delivery of the gold to the counterparty.

The estimated bullion transport costs, liability charges and refining costs used for the financial analysis are based on contract prices agreed with third-parties.

19.2 Commodity Prices

Commodity prices used in Mineral Resource and Mineral Reserve estimates are set by Kirkland Lake Gold at the corporate level. The current gold price provided for Mineral Reserve estimation is US\$1,300/oz, and US\$ 1,500/oz for Mineral Resource estimation. Both Mineral Resource and Mineral Reserve estimates use an exchange rate assumption of 1.31 C\$/US\$.

19.3 Material Contracts

Kirkland Lake Gold has a number of contracts, agreement and/or purchase orders in place for supply and services that are material to the operation (Table 19-1). All contracts or agreements are negotiated with vendors and have a contractual scope, terms and conditions. Contracts are negotiated and renewed as needed. Contract terms are considered to be within industry norms, and typical of similar contracts in Canada with which Kirkland Lake Gold is familiar.

19.4 Comments on Market Studies and Contracts

The QP notes the following.

- The doré produced by the mine is readily marketable. Metal prices are set corporately for Mineral Resource and Mineral Reserve estimation;
- The QP has reviewed commodity pricing assumptions, marketing assumptions and the current major contract areas, and considers the information acceptable for use in estimating Mineral Reserves and in the economic analysis that supports the Mineral Reserves.

Table 19-1: Material Contracts Currently in Place

Product	Supplier	Status of Contract
Heavy equipment (CAT) parts and maintenance	Toromont Industries Ltd.	MARC contract, support agreement, stock and parts inventory management
Diesel	Imperial Oil	Supply agreement
Plant reagents	The Chemours Company (cyanide) Univar Canada Ltd. (sulphur dioxide and other reagents)	Supply agreement
Power	IESO (Independent Electrical System Operator)	Power supply agreement
Grinding media	Molycop Inc.	Supply agreement
Mill liners and other wear material	Bradken Limited	Supply agreement
Open pit explosives	Orica Mining Services	Supply, services and explosive manufacture agreement
TMA construction	Teranorth Construction and Engineering Limited North Rock Construction Northec Construction	Construction services
Camp and catering	Aramark Remote Workplace	Service agreement
Heavy fabrication	Carriere Industrial Supply Ltd. The Bucket Shop	Fabrication and labour agreement
Heavy equipment (drills) parts and maintenance	Epiroc	Supply and service agreement
Tire Supply	Bridgestone, Goodyear, Michelin	Supply contract
Labour supply	Levert Personnel Resources Inc.	Labour supply agreement
Core and reverse circulation drilling	Boart Longyear; FTE Drilling	Service agreements
Lubricants	Imperial Oil	Supply agreement
Assay	SGS Canada Inc.	Service agreement
Refining services	Asahi Refining	Service agreement

20.0 Environmental Studies, Permitting and Social or Community Impact

20.1 Environmental and Supporting Studies

The Detour Lake Main Pit and West Detour areas were subject to extensive baseline, environmental monitoring, and technical studies, as per provincial and federal regulatory requirements.

Local site area watersheds tend to be of small to modest size, generally less than 50 km². The majority of the West Detour area is within the watersheds of Lindbergh Lake/Creek and Linden Creek. Both watersheds drain south into the Detour River. The Detour River flows into the Turgeon River and Harricanaw River, and eventually into James Bay. A number of small and generally shallow, lakes also occur in the area.

Vegetation communities are typical of the region and are comprised primarily of coniferous and mixed coniferous forests, and open and treed muskeg. There is extensive evidence of previous land disturbances by forestry activities, as well as past exploration (primarily by other exploration companies).

Fish and wildlife species in the area are generally typical of those inhabiting the boreal forests of northeastern Ontario.

The presence of Woodland Caribou is of particular note because it is a Species at Risk (SAR), designated as Threatened under the Provincial *Endangered Species Act* (ESA) and Federal *Species at Risk Act*. Potential impacts and mitigation measures are being addressed through the *Endangered Species Act* Overall Benefit Permit, for which approval is anticipated in late 2021.

20.2 Site Monitoring

20.2.1 Air Quality

The Detour Lake Mine site is remote from off-property human receptors (permanent and seasonal residences and commercial establishments); hence there are no restrictions on air and noise emissions relative to human receptors. The mine is required to comply with air quality standards, point of impingement guidelines, and ambient air quality criteria specified in Ontario Reg. 419/05. The installed operating monitoring systems demonstrate compliance with these standards, which confirms the predictions of no significant air quality or noise impacts. Air quality and noise modeling undertaken for the West Detour project Draft Environmental Study Report (ESR) confirmed that the project will comply with the required provincial standards and criteria.

20.2.2 Metals Leaching and Acid Rock Drainage

Due to historical mining in the region, the geological materials (ore, waste rock, tailings, and overburden) at the Detour Lake Main Pit have undergone multiple metal leaching and acid rock drainage (ML/ARD) assessments by various investigators in compliance with best-practice, industry-standard methods. It was predicted that ML/ARD potential for waste rock and tailings is low due to the relative lack of enrichment in sulphide and other metals. To date, over 80% of waste rock has been classified as non-potentially acid generating (NAG). Analytical results continue to support that ARD risk is low based on low sulphide content.

To provide greater assurance in the event of ARD during operations and/or closure, PAG and NAG waste rock materials are segregated into separate stockpiles. The natural topography under MRS1, the storage facility for PAG water rock, is sloped towards the open pit, allowing mine contact water to be managed more efficiently. Similarly, PAG rock from the West Detour and North Pit pits will be segregated in a new stockpile, MRS3. NAG waste rock is generally stored in MRS2.

Production tailings are governed by the same classification criteria as waste rock and are subject to frequent confirmatory sampling. Composites are collected weekly and undergo ML/ARD characterization monthly at a minimum. Based on geochemical testing to date, Detour Lake Main Pit tailings continue to have low ML/ARD potential, which is consistent with project development predictive studies and ongoing characterization work conducted since operations commenced in 2013.

Mine-contact water from all mine facilities, including stockpiles and TMA cells, is captured by the water management system, a network of collection ditches, ponds, pipelines and pumping infrastructure to ensure environmental protection. Discharge of surplus mine-contact water occurs only at select, specially permitted locations, provided that water quality meets federal, provincial, and site-specific permitted criteria. Water that has been in contact with processing reagents (i.e., water stored in the TMA) is not discharged, and is instead re-circulated through the process plant or locked in tailings void spaces.

20.2.3 Ground Water, Surface Water and Aquatic Resources

Kirkland Lake Gold has a several programs designed to be protective of environmental water quality. The monitoring network includes approximately 71 surface water stations and 141 groundwater stations. Regular data collection, analysis, and interpretation on a monthly and quarterly basis allow for risk identification and adaptive management.

Parameters associated with waste rock weathering have been observed in surface waters in the Karel Creek, Linden Creek, Easter Creek, and East Creek watersheds. Parameter levels were not deemed to be of concern because they were either below water quality guidelines, within or similar to baseline range, and/or engineered controls have shown to be effective following implementation. There have been no significant changes to surface water quality related to mining operations in the Sunday Lake, Deem Lake, and Lower Detour watersheds, indicating that any significant trends were localized to the mine site and do not extend beyond the site watershed boundaries.

Development of the Detour Lake Mine site affected some fisheries and other aquatic resources through the displacement or alteration of fish habitat. Mitigation measures were implemented to limit potential effects related to mining of the Detour Lake Main Pit on aquatic resources. In addition, a fish compensation plan was approved by the federal and provincial regulatory agencies, following full consultation with Indigenous communities, to address impacts related to the development of the TMA and mine rock stockpiles.

Additional mitigation measures and compensations plans have been proposed to address potential impacts to fisheries and other aquatic resources related to the development of the West Detour pit. This will require the removal of Walter Lake and will have an impact on Linden Creek. In advance of the project being undertaken, the required regulatory approvals will be obtained and appropriate compensations plans based on previous experience at the site will be implemented. These plans are currently being discussed with the relevant regulatory agencies and Indigenous communities.

Groundwater concentrations in the Karel Creek, Linden Creek, Easter Creek, East Creek, Sunday Lake, Deem Lake, and Lower Detour watersheds were generally below environmental monitoring screening criteria where applicable. Based on sampling results to date and comparison to previous data, there were no significant changes to the groundwater quality, except for potential seepage to groundwater in the vicinity of TMA Cell 1, which is being addressed through a detailed investigation.

There are no local groundwater users in the immediate area that could potentially be affected by groundwater depletion that is directly linked to open pit development. No significant environmental impacts to groundwater are currently predicted to occur in conjunction with the mining of the Detour Lake Main Pit, West Detour Pit, or North Pit, or the development of mine rock stockpiles or the TMA, after the implementation of proposed mitigation measures.

Kirkland Lake Gold is committed to continuous improvement through monitoring and the identification and mitigation of risks to the receiving environment.

20.2.4 Vegetation and Wildlife

Potential impacts to vegetation and wildlife are linked as the principal mine-related impacts to wildlife typically involve habitat alterations. Measures to minimize adverse effects to area plants and wildlife include but are not limited to: minimizing the project footprint; maintaining a minimum 120 m buffer around watercourses; avoidance of unnecessary disturbance to wetlands; and avoidance of tree clearing during the bird nesting period.

In addition, there are a number of habitat and wildlife considerations linked to Woodland Caribou, which has been identified as a species at risk. Recommendations for the protection of Woodland Caribou include, as reasonable: minimizing the overall project footprint; avoidance of critical over-wintering habitat; minimizing disturbance to mature upland black spruce-jack pine forests that support a high abundance of terrestrial and arboreal lichens (a preferred food source); and minimizing the potential for caribou/vehicular traffic interaction. Kirkland Lake Gold has also implemented a caribou tracking and

monitoring program. Additional consultation is in progress with MECP for finalizing mitigation and compensation requirements related to caribou and the West Detour pit. The Overall Benefit Permit has been prepared with Indigenous and regulatory input and submitted to MECP in early 2021 and awaiting for posting on the Environmental Registry for public comments before approval.

20.2.5 Cultural and Heritage Resources

Archaeological investigations were historically carried out for the mine access road associated with the previous operation, and more recently as part of baseline investigations. These studies included Aboriginal participation. None of the studies identified archaeological sites that are proximal to the Detour Lake Main mine site, including the West Detour area, that are likely to be affected by the mine in any foreseeable manner. The overall potential for encountering unforeseen cultural heritage or archaeological sites that would conflict with the proposed development plan for the site is considered to be extremely low.

20.3 Tailings Management Area

20.3.1 Tailings Management Area

Tailings are stored in at surface in an engineered TMA that is located east of the process plant. The TMA consists of three cells being developed in a planned, progressive manner:

- Cell 1 was built over a historic tailings storage facility from a previous mining operation;
- Cell 2 was developed to the north of Cell 1;
- The Cell 3 area was cleared to the south of Cell 1.

Cells 1 and 2 are dominantly tailings storage cells, while the Cell 3 area will first be used for the mine water pond (a water management facility), until the Cell 3 tailing facility is constructed later in the mine life (2027). The planned raise schedule is set out in

The TMA is designed to function as three independent cells for tailings and water management. Tailings deposition will generally occur in only one cell at any time with water recycle for process plant use occurring mainly from the active cells, but possibly also during some periods from the inactive deposition cell prior to final closure.

The initial design of the TMA was optimized during ongoing operations, as additional information became available through ongoing construction and in response to a requirement for additional capacity (and wish to stay within the same footprint). In Q4 2020, tailings deposition was transitioned from Cell 1 to Cell 2. The construction of a thickened tails is planned with deposition of thickened tails starting in January 2025. Starting in 2037, tails are to be deposited in the Detour Main Pit (mine operation in the Detour Main Pit is forecast to be complete in 2036). The TMA Cell 2 and Cell 3 facility will provide for storage

of approximately 283 Mm³ (454 Mt) of tailings solids. Capital investment is reflected in the cash flow model.

The general design and operating practices are as follows:

- The tailings produced will increase year over year for a five-year period starting at a rate of approximately 23 Mt/a (63,0133 t/d) in 2020 to 28 Mt/a (76,712 t/d) in 2025 (maximum 90,000 t/d). Tailings will be pre-treated for cyanide destruction at the process plant and pumped from there through a surface pipeline to the TMA;
- Tailings will be pumped as slurry and deposited in Cell 2 and Cell 3 using a combination of spigotting and end-dumping to form smooth tailings beaches while progressively sloping the cell to direct final surface drainage to spillway location until 2037 for a total of 441 Mt, at which time tailings deposition will be deposited in the Main Pit when mining is complete. There will be a total of 156 Mt of tailings deposited in the Detour Main Pit.
- It is expected that a thickened tails plant will be constructed and will be depositing thickened in the facility starting in January 2025 until 2037 at which time the tails will be deposited in the Main Pit. Test work has shown that a density of 1.7 t/m³ will be used for the consolidated tails calculation.
- The design maximizes the tailings storage volume while minimizing the dam height, with dams being raised in stages to support utilization of waste rock produced during operations (and thereby reducing stockpiling requirements);
- The dams are designed for the most severe flood and earthquake criteria, being the probable maximum flood and the maximum credible earthquake in accordance with the higher standard of either Canadian Dam Association/MAC Dam Safety Guidelines or ANCOLD Dam Safety Guidelines;
- An emergency spillway that meets the probable maximum flood is maintained for each dam lift and for each tailing cell. This ensures water can be discharged in an emergency situation without eroding the dam;
- Dams have a low permeability element(s) to provide for efficient water management and minimize seepage rates;
- Detailed design documents are provided to applicable regulatory authorities for review and approval in advance of each lift of the dam.

The TMA currently serves as the central water management facility for local runoff, tailings slurry water, mine water, and water reclaimed for operation of the process plant. It is expected that a process water pond will be constructed prior to the commissioning of the thickened tails plant in 2025.

The regulatory approval applications, submitted to the Ministry of Environment, Conservation and Parks (MECP) for amended environmental compliance approval (ECA) #8672-ANBKVR and NDMNRF for dam approval, provide the approved detailed design and should be referred to for design details. On an annual basis, the regulatory authorities

receive operational information on water quality and receiving environment monitoring (annual ECA report submitted to the MECP) and geotechnical information on the dams (annual as-built report submitted to NDMNRF).

Inspection and monitoring activities are performed during construction and operation of the tailings dams to assess their performance and safety; and to verify that actual conditions are consistent with the design assumptions and intentions. Inspection and monitoring also optimizes maintenance and repair costs, provides warning of potential impending risks, and provides sufficient time to implement remedial measures, if required. A dam safety review completed in 2020 confirmed that the TMA Cell 1 is performing as designed. In addition, various dam safety inspections are conducted on a monthly, weekly, and daily basis.

20.3.2 Cell 1

Deposition of tailings in TMA Cell 1 began in 2013 and continued into Q4 2020 to a final elevation of 322 masl and volume of 153.1 Mt. TMA Cell 1 was constructed in a series of annual raises intended to provide capacity for tailings as needed and to maintain sufficient freeboard on the dams. The final raise, Stage 8, was completed in 2019.

20.3.3 Cell 2

Cell 2 is the second cell for tailings storage. The construction for the starter dam (Stage 1) has been completed (2020). The starter dam comprises a silty sand to sandy silt till core with graded granular chimney and blanket filters downstream of the core. The upstream and downstream shells of the Cell 2 starter dam consist of mine run rockfill with upstream and downstream slopes of 2H:1V. The total length of the Cell 2 starter dam is 7.5 km and ties to the existing Cell 1 Dam. At full capacity, Cell 2 will provide containment for 246 Mt of dry tailings and a pond volume of 5 Mm³, corresponding to an ultimate dam crest elevation of 319 masl. Deposition of tailings in TMA Cell 2 began in Q4 2020. The 5.5 Mm³ water pond volume will be removed before the thickened tails are deposited in 2025.

Subsequent raises beyond the Cell 2 starter dam crest elevation of 290 m will be accomplished by means of a downstream raised rockfill shell with a geomembrane liner on the upstream face of the dam, with the final design subject to ongoing engineering. Table 20-1 summarizes the proposed raise schedule. The starter dam phase is complete.

20.3.4 Cell 3

Establishment of a mine water pond within the Cell 3 area was part of the design addressed in the Detour Lake Mine Environmental Study Report and associated TMA approvals. Construction of Cell 3 is scheduled to start in 2027 with a similar design methodology as Cell 2. Cell 3 will provide containment for 208 Mt of dry tailings. The proposed raise schedule is presented in Table 20-2.

Table 20-1: Cell 2 TMA Raise Schedule

Raising Sequence (Calendar Year)	Tailings Tonnage (Mt)	Tailings Volume (Mm ³)	Operating Pond (Mm ³)	EDF (Mm ³)	Cumulative Total Storage	
					(Mm ³)	(m)
Starter dam (2018–2020)	25.4	19.5	5.0	2.4	26.9	286.7
Stage 2 raise (2021)	51.5	34.4	5.0	2.4	41.8	290.4
Stage 3 raise (2022)	78.4	52.3	0.0	2.4	54.7	293.4
Stage 4 raise (2023)	106.1	70.7	0.0	2.4	73.1	297.6
Stage 5 raise (2024)	134.1	88.0	0.0	2.4	90.4	301.5
Stage 6 raise (2025)	162.1	104.9	0.0	2.4	107.3	305.2
Stage 7 raise (2026)	190.0	121.9	0.0	2.4	124.3	308.9
Stage 8 raise (2027)	218.1	138.9	0.0	2.4	141.3	312.5
Stage 9 raise (2028)	246.1	155.9	0.0	2.4	158.3	316.0

Table 20-2: Cell 3 TMA Raise Schedule

Raising Sequence (Calendar Year)	Tailings Tonnage (Mt)	Tailings Volume (Mm ³)	Operating Pond (Mm ³)	EDF (Mm ³)	Cumulative Total Storage	
					(Mm ³)	(m)
Starter dam (2027–2029)	29.2	17.7	0.0	1.5	19.2	283.7
Stage 2 raise (2030)	58.4	35.4	0.0	1.5	36.9	291.1
Stage 3 raise (2031)	87.7	53.1	0.0	1.5	54.6	298.2
Stage 4 raise (2032)	116.9	70.8	0.0	1.5	72.3	305.0
Stage 5 raise (2033)	146.1	88.5	0.0	1.5	90.0	311.6
Stage 6 raise (2034)	175.3	106.2	0.0	1.5	107.7	317.9
Stage 7 raise (2035)	208.7	126.5	0.0	1.5	128.0	325.0

20.3.5 Performance Monitoring

Inspection and monitoring is performed during construction and operation of the tailings dams to assess their performance and safety; and to verify that actual conditions are consistent with the design assumptions and intentions.

Inspection and monitoring also optimizes maintenance and repair costs, provides warning of potential impending risks, and provides sufficient time to implement remedial measures, if required. A dam safety review completed in 2020 confirmed that the TMA is performing as designed.

20.4 Water Management

Operational water management, risk assessment, and mitigation planning are informed by:

- The integrated surface water-groundwater model, which captures hydrological and hydrogeological information to characterize and predict flows (e.g., pit draw down, water level fluctuations in the local watershed);
- The water balance/water quality model captures water quantity and quality for both the operating and post-closure periods, under for average, wet and dry conditions. The model considers sources from the TMA, open pit, and mine rock stockpiles, and other sources. This information is used to ensure sufficient water is available to operate the process plant, manage the volume of water in the TMA and mine water pond, and identify effluent discharge requirements.

Environmental protection is ensured through the water management network, which collects seepage and runoff from all mine waste facilities through a system of ditching, pumping, and pipeline infrastructure. The modular design allows for the addition of treatment facilities if required. In 2020, a mine water pond with a capacity of 3.5 Mm³ was completed. The mine water pond serves as a central water management facility (e.g., for open pit water and local runoff), and provides additional contingencies for storage and treatment, if needed.

Tailings, tailings slurry water, and water reclaimed for the operation of the process plant are managed through the TMA. The water management objectives for the TMA are as follows:

- Provide adequate retention time for control of total suspended solids prior to reclaiming water for process plant use;
- Optimize reclaim water volume for process plant operations;
- Allow for settling of suspended solids and natural degradation of ammonia in a separate mine water pond if and when effluent discharge to the environment is required;
- Handle upset conditions and/or runoff generated from major storm events.

Water is continuously reclaimed back to the plant site for processing needs using a decant tower with pumping facilities located in the tailings pond. Make-up water for the operation of the process plant is sourced from East Lake when required.

The TMA is designed to contain runoff resulting from an environmental design flood. As a minimum, the environmental design flood was selected as the 1:100 year 15-day spring maximum runoff with no discharge to the environment. The TMA was designed for 'no-discharge' under this condition.

The TMA has sufficient freeboard to safely pass the runoff resulting from the inflow design flood through the emergency spillway. The inflow design flood is the 24-hour probable maximum flood event. The discharge from the spillway is directed towards the watershed of East Lake which flows into the Detour River system and north to Hudson Bay.

The proactive management of water issues included incorporating prevention measures into the design of the TMA. The following strategies have been adopted to reduce the risk of contaminants entering the local groundwater or surface water regimes:

- The milling includes a final process step to destroy cyanide to very low levels in the tailings before it is pumped to the TMA;
- TMA seepage collection ditches and ponds have been constructed at the base of Cell 1 with pumps installed to recycle the water back to the TMA. Additional ditches and pumps will be installed for Cells 2 and 3 when required.

When required, water collected from the mine site (that has not been in contact with processed reagents) is discharged to East Creek to prevent the accumulation of water above target operating levels. In 2023, the discharge location will be transferred to a location on Sunday Creek, pending regulatory approval.

20.5 Permitting Considerations

Most mining projects in Canada are reviewed under one or more EA processes. The federal EA process for Canadian mines is detailed in the CEAA. A federal EA was triggered for the Detour Lake project due to:

- The requirement for an Explosives Factory License under the *Explosives Act* for a project-dedicated explosives manufacturing factory;
- The need for one or more Authorization(s) for Harmful Alteration Disruption or Destruction of Fish Habitat according to the *Fisheries Act*.

These licences/authorizations were granted.

Four provincial EAs were approved for the Detour Lake project:

- July 2010: Ontario Ministry of Environment Class EA for Electricity Projects, for the diesel power generation required to support the construction phase (AMEC, 2010a);
- November 2010: Ontario MNR Class EA for Resource Stewardship and Facility Development Projects, for the construction of facilities off-lease, and for such aspects as on-lease aggregate operations or in-water works (AMEC, 2010c);
- December 2010: Ontario individual EA for Electricity Projects, for construction of a 230 kV transmission line (AMEC, 2010b);
- March 2012: Ontario MOE individual EA for Electricity Projects of 10 MW, for allowing a diesel-generated contingency power supply to service the construction needs should the powerline not be operable by the third quarter of 2011. With the successful energizing of the powerline in October 2011, these facilities were not installed.

In accordance with Section 143(2) of the Mining Act, R.S.O. 1990, Detour Gold submitted a Mine Closure Plan (for Production) in 2010, followed by Closure Plan Update

Amendments in 2014 and 2019. ENDM filed these documents on October 28, 2010, February 18, 2015, and November 8, 2019, respectively. In addition, a scoped closure plan amendment was submitted in early 2021 and filed during August 2021 specifically for the airstrip.

Subsequent permits, such as Permits to Take Water and Environmental Compliance Approvals, have been approved, renewed, and/or amended as needed in order to support ongoing development and operations.

Prior to development of the West Detour project, a number of Provincial and Federal environmental approvals, or amendments to existing approvals, will be required. In particular, the West Detour project will be subject to a Class C Environmental Assessment pursuant to the Ontario *Environmental Assessment Act* as managed by NDMNRF. The ESR was published in Draft in January 2017, and a Final ESR was submitted to NDMNRF in August 2019. An ESR Addendum was submitted in October 2020 to address additional comments from government and Indigenous communities. The West Detour ESR was approved and the statement of completion was provided on March 2021.

Table 20-3 lists additional environmental approvals expected to be required to develop, operate and close the West Detour project.

20.6 Social and Community Impact Considerations

The Detour Lake Mine continues to have a positive socio-economic impact on local communities. At September 30, 2021, the permanent workforce totaled 1,152 employees. The Detour Lake Mine also creates local and provincial business opportunities.

20.6.1 Consultation Principles

Kirkland Lake Gold has undertaken ongoing consultation with the public, government regulators and its Indigenous partners regarding the operations, environmental commitments and planned activities. Kirkland Lake Gold has established the following consultation principles:

- Early notification: information about the project will be provided to stakeholders in a timely manner to facilitate the stakeholder engagement process;
- Open communication: all pertinent information about the project will be shared with stakeholders. Stakeholder input will be sought, documented, and will be addressed in the project. If input is not addressed, a reason will be provided;
- Accessible information: a variety of stakeholder engagement methods will be used that are written in plain language to distribute information about the project and to gather stakeholder feedback;

Table 20-3: List of Anticipated Environmental Approvals Required

Permit/Approval	Agency Responsible	Description
<i>Provincial</i>		
Permit to Take Water <i>Ontario Water Resources Act</i>	MECP	Taking of water of > 50,000 L/d (mine dewatering and development)
ECA Amendment <i>Environmental Protection Act</i>	MECP	Amendment to the existing DLM approvals (air and noise; industrial sewage works)
Work Permit <i>Public Lands Act / Lakes and Rivers Improvement Act</i>	NDMNRF	Work/construction on Crown land, including work below the high-water mark of local watercourses and construction of dams if needed
Land Use Permit <i>Public Lands Act</i>	NDMNRF	Establish of tenure for facilities constructed on Crown land (pipeline and associated infrastructure/facilities)
Forest Resource License (Cutting Permit) <i>Crown Forest Sustainability Act</i>	NDMNRF	Clearing of Crown merchantable timber (if any)
Endangered Species Act Permit <i>Endangered Species Act</i>	MECP	Management of activities related to species-at-risk for Woodland Caribou
Closure Plan Amendment <i>Mining Act</i>	NDMNRF	For mine development, production and eventual decommissioning of the West Detour project
<i>Federal</i>		
Authorization(s) for Serious Harm to Fish <i>Fisheries Act</i>	DFO	For the establishment of the: mine rock stockpile(s); watercourse diversions / rerouting; and/or mine dewatering groundwater effects that would cause disruption to watercourses supporting fisheries
Listing on Schedule 2 of MDMER to authorize deposition of a deleterious substance in a water frequented by fish	ECCC	For the establishment of mine rock stockpile(s) over waters frequented by fish

Notes: ECCC = Environment and Climate Change Canada; NDMNRF = Ministry of Northern Development, Mines, Natural Resources and Forestry; MECP = Ministry of Environment, Conservation and Parks , DFO = Department of Fisheries and Oceans

- Flexible process: feedback on the stakeholder engagement process will be sought from interested individuals and stakeholders to ensure that meaningful opportunities for input are provided. Changes will be made to the public and stakeholder participation program as necessary to reflect stakeholder needs;
- Capacity building: where acceptable and appropriate to all parties involved, community liaisons and working committees will be worked with to facilitate information exchange;
- Mutual respect: respect will be given to the differing values and constraints of each party and to project timelines. There will be follow-through on commitments made.

These principles continue to guide interactions within mine permitting, operations, and exploration.

The environmental approval applications will provide additional detail regarding the engineering design of the proposed West Detour project facilities, potential effects and proposed mitigations measures. No changes were expected to the approvals list at the Report effective date.

20.6.2 First Nations

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

Indigenous employees at the Detour Lake Mine comprised 18% of the workforce as of December 31, 2020, compared to the Ontario mining industry average of 11.2%. At the end of 2020, the Detour Lake Mine had 150 employees from our local Indigenous partner communities and 42 self-identified Indigenous employees from other First Nations and Métis communities.

20.7 Closure and Reclamation Planning

Kirkland Lake Gold acknowledges that the company will be responsible for providing the full amount of the financial assurance for the closure and rehabilitation of the Detour Lake Mine and the West Detour project, subject to any required or approved changes to the Closure Plan. There are six developmental phases that trigger the issuance of security bonding for the operation (Table 20-4). Financial assurance is submitted to the ENDM prior to the beginning of the associated activities of each phase, or as otherwise arranged with the ENDM.

As per the Detour Lake Mine Closure Plan Amendment 2, the total estimated closure cost for the Detour Lake Operations at peak development (i.e., all facilities constructed) is \$149,811,737, exclusive of the West Detour project. Security provided to NDMNRF to date for the present stage of development totals \$105,798,258. Financial assurance for the West Detour project will be formalized with the filing of Closure Plan Amendment 3, anticipated for Q2 2022/Q3 2022.

Table 20-4: Financial Assurance Timing Summary

Financial Assurance Phase	Description	Timing for Providing Additional Security
Phase 1 & Phase 2	Pre-construction and construction of Detour Lake Mine	Completed in 2018 and 2019
Phase 3	Start of tailings deposition in Cell 2	Completed in 2020
Phase 4	Onset of West Detour Project development	Planned for 2023
Phase 5	Start of tailings deposition in Cell 3	Planned for 2031
Phase 6	End of processing, active closure, post-closure infrastructure, maintenance and monitoring	Planned for 2041

21.0 Capital and Operating Costs

21.1 Capital Cost Estimates

21.1.1 Summary

Capital costs are summarized by area in five-year periods in Table 21-1. Capital costs are greater at the start of the plan due to growth capital investments required to increase plant throughput to 28 Mt/a (refer to Table 21-2 for a summary of sustaining² versus growth¹ capital).

Capital costs consist largely of mining equipment (replacements, additions, component replacements, capitalized maintenance), construction of tailings cells and dam raises, deferred stripping using a by-phase approach, and processing plant projects to increase plant capacity to 28 Mt/a.

Capital costs for the first three years of plan are based on budget cycle estimates with supplier quotes, engineered designs, maintenance strategies, production plans or preliminary estimates. Estimates in later years are based on maintenance strategies, equipment replacement schedules, and long-term sustaining capital estimates are based on recent operating history and current asset value. Tailings cells 2 and 3 are based on physical material movement requirements and recent unit cost history.

21.1.2 Mining

Mining capital includes additional and replacement equipment capital, planned component replacements of major fleets, and the capitalized portion of the Maintenance and Repair Contract (MARC) for the 795 haul truck fleet.

Major capital projects include expansion of the truck shop to accommodate increased fleet count, the construction of field maintenance domes and a large office and dry complex, as well upgrades to pit electrical and wireless infrastructure.

21.1.3 Processing Plant

Capital spending in the process plant includes a significant portion of growth capital in 2021–2022 required to achieve 28 Mt/a. This includes secondary crusher feed pre-screening, a re-feed system after the secondary crushers, and addition of leaching and cyanide destruction tanks.

Mining, processing and exploration samples are currently shipped off-site for assaying by a contractor. The construction of an automated on-site laboratory in 2021 will internalize assaying costs as well as provide shorter turnaround time to improve operational decision-making.

¹ Refer to Cautionary Statement on Non-IFRS Financial Performance Measures

Table 21-1: Capital Cost Summary by Area

Capital Cost Summary (C\$M)	2021–2025	2026–2030	2031–2035	2036–2040	2041–2043	LOM
Mining ¹	529	557	285	138	29	1,538
Deferred stripping	606	717	48	—	—	1,371
Processing	301	64	53	38	7	463
Tailings management	308	358	332	—	—	997
West Detour	87	9	2	1	—	100
Site administration ²	148	39	38	38	12	274
Total Capital Costs	1,978	1,744	757	216	48	4,744

Notes: 1. Includes capital projects, equipment replacements/additions, planned component replacements, and capitalized portion of maintenance and repair contract of 795 haul trucks. 2. Includes infrastructure, water management, and camp.

Table 21-2: Capital Cost Summary by Sustaining/Growth

Area	Capital Cost Summary (C\$M)	2021–2025	2026–2030	2031–2035	2036–2040	2041–2043	LOM
Sustaining ¹	Projects, equipment, maintenance	856	991	566	214	48	2,676
	Deferred stripping	127	212	48	—	—	387
	<i>Sub-total</i>	<i>983</i>	<i>1,204</i>	<i>614</i>	<i>214</i>	<i>48</i>	<i>3,063</i>
Growth ¹	Projects, equipment	516	36	144	1	—	697
	Deferred stripping	479	504	—	—	—	983
	<i>Subtotal</i>	<i>995</i>	<i>541</i>	<i>144</i>	<i>1</i>	<i>—</i>	<i>1,680</i>
Total Capital Costs		1,978	1,744	757	216	48	4,744

Notes: 1. Refer to Cautionary Statement on Non-IFRS Financial Performance Measures.

Construction of a tailings thickening plant required for the transition to thickened tailings is included in 2023–2024.

21.1.4 Site Administration

Major site administration capital projects include the construction of long-term evolution (LTE) communication towers to improve cellular coverage along the roadways between the town of Cochrane and the Detour Lake Mine site as well as upgrade the existing mesh wi-fi network onsite to a private LTE solution. Construction of a new mine water pond required for the transition to thickened tailings is included in 2022; similarly, a water treatment plant is included in 2024.

Additional camp capacity with the construction of new wings to existing camps will support greater workforce requirements in the peak years of mining activity.

Site administration costs also include site infrastructure maintenance, water management, and camps.

21.1.5 Tailings Management Area

Tailings cells 2 and 3 are based on physical material movement requirements and recent unit cost history. Physical requirements include the placement of non-acid generating waste rock, till, and the production of crushed waste for dam filter elements. Additional TMA capital costs include support of construction management, quality control, geotechnical control, physical infrastructure such as power lines, pumps and pipelines, as well as camp accommodations.

Mining costs related to the incremental hauling of waste for strategic placement favorable to TMA construction are transferred to TMA capital costs. Costs associated with the operation and maintenance of mining equipment for TMA construction are also transferred to TMA capital costs.

Construction of Cell 3 will be completed in 2035, and starting in 2037, process plant tailings will be sent to fill the Detour Lake Main Pit, with no associated TMA capital costs.

21.1.6 Deferred Stripping Costs

Stripping costs which provide probable future economic benefits and identifiable improved access to the ore body and which can be measured reliably can be capitalized. The estimates for deferred stripping are based on the excess tonnes of waste material mined above the LOM average strip ratio multiplied by the average unit mining cost per period, on a per pit basis.

Operationally, deferred stripping is managed on a monthly basis. Actual monthly results will differ as the cost estimate is calculated based on annual average stripping ratios which can vary significantly from month to month.

Deferred stripping is classified as sustaining capital except where:

- It is expected to take at least 12 months;
- It will provide an ore production phase expected to be >5 years;

in which case it is classified as growth capital.

21.1.7 West Detour

Capital costs related to the West Detour project including drilling of environmental monitoring wells, fish compensation, Caribou offsetting, milestone payments to First Nations, as well as water management required for permitting.

21.2 Operating Cost Estimates

21.2.1 Summary

The operating cost estimate is summarized in Table 21-3, and the unit cost forecasts are provided in Table 21-4.

Table 21-3: Operating Cost Summary

Operating Cost (C\$M)	2021–2025	2026–2030	2031–2035	2036–2040	2041–2043	LOM
Mining ^{1,2}	1,826	1,886	1,530	665	83	5,989
Processing ³	1,084	1,244	1,244	1,244	394	5,209
Site administration ^{4,5}	508	519	502	295	86	1,910
<i>Subtotal</i>	<i>3,417</i>	<i>3,649</i>	<i>3,276</i>	<i>2,204</i>	<i>563</i>	<i>13,109</i>
Adjustments ⁶	(734)	(695)	(231)	671	418	(571)
Total	2,683	2,954	3,045	2,875	981	12,538

Notes: 1. Excludes adjustment for deferred stripping. 2. Mining costs reduction reflect depletion of stockpiles late in mine life. 3. Increase in Processing costs reflects increased electricity price starting in 2025. 4. Includes First Nations costs. 5. Reduction in the site administration charges late in the mine life reflects a reduction in mining activity. 6. Includes adjustments for deferred stripping, royalties, and changes in inventory.

Table 21-4: Operating Unit Cost Summary

		2021–2025	2026–2030	2031–2035	2036–2040	2041–2043	LOM
Mining unit cost (C\$/t ex-pit) ¹	Mining ²	3.19	2.98	3.69	6.29	—	3.47
Operating unit cost (C\$/t milled) ¹	Mining ^{2,3}	13.75	13.47	10.93	4.75	1.87	10.03
	Processing ⁴	8.16	8.88	8.89	8.88	8.91	8.73
	Site administration ^{5,6}	3.82	3.71	3.59	2.11	1.95	3.20
	<i>Subtotal</i>	<i>25.74</i>	<i>26.06</i>	<i>23.40</i>	<i>15.74</i>	<i>12.73</i>	<i>21.96</i>
	Adjustments ⁷	(5.53)	(4.96)	(1.65)	4.79	9.46	(0.96)
	Total	20.21	21.10	21.75	20.53	22.19	21.00
Operating unit cost (C\$/oz sold) ¹	Total	742	916	687	1,078	1,697	864

Notes: 1. Refer to Cautionary Statement on Non-IFRS Financial Performance Measures. 2. Excludes adjustment for deferred stripping. 3. Mining costs reduction reflect depletion of stockpiles late in mine life. 4. Increase in Processing costs reflects increased electricity price starting in 2025. 5. Includes First Nations costs. 6. Reduction in G&A late in mine life reflects reduction in mining activity. 7. Includes adjustments for deferred stripping, royalties, and changes in inventory.

21.2.2 Basis of Estimate

Operating costs for are based on actual costs seen during operations at site and are projected through the Life of Mine plan.

All operating costs were evaluated on an annual basis and include all costs related to:

- Mining ore and waste from the Detour Main, West Detour and North pits;
- Processing of ore;
- All expenses associated with site administration;

- Adjustments for deferred stripping and changes in inventory;
- Costs related to agreements with First Nations;
- Royalties payable to Franco–Nevada and First Nations.

The consumables for the operation are based on current prices or contracts for future years. In general, approximately 80% of operating costs are based in Canadian dollars and 20% have US dollar exposure. The exchange rate used in the financial model is 1.31 C\$/US\$.

21.2.3 Mining Costs

Key inputs to the mining costs include the following:

- Material movement schedule;
- Equipment fleet productivities and operating time parameters;
- Equipment operating and maintenance costs profiles; and
- Truck cycle times and diesel fuel consumptions.

These parameters are adjusted over the LOM to reflect the specific mining locations and material types, life-cycle equipment costing and improvements in operating efficiency, etc.

The biggest contributor to the mining costs is labour, followed in order by maintenance, diesel, and consumables.

Mining costs related to the TMA for incremental haul of waste rock to favorable WRSF locations and operation of mining equipment are transferred from mine operating to capital costs.

21.2.4 Processing Costs

The operating cost estimate for the processing plant was based on operating expenditures experienced to date. Key drivers for processing costs include the tonnes processed, power costs (electricity), reagent and consumables consumption and plant maintenance (operating time and shutdown work).

Kirkland Lake Gold has a power contract in place to the end of 2024. A modelled rate of \$25/MWh (or \$0.025/kWh) was applied up to the end of the contract. From 2025 onward, the electricity price was estimated at \$74/MWh (or \$0.074/kWh).

Processing costs reflect the transition to an on-site assay laboratory in late 2021.

The biggest contributor to the process costs is consumables/reagents, followed in order by power, labour, and maintenance costs.

21.2.5 Site Administration Costs

Site administration costs include all materials and personnel costs associated with the mine administration and infrastructure support. These costs include: camp (including personnel

transport), site infrastructure, First Nations, security, IT and telecoms, supply chain, human resources, finance, environment, health and safety, contracts, and site management.

General and administrative costs were scaled back in the late stages of the mine life to reflect the declining administrative support required for declining mining activities starting in 2036.

21.3 Comments on Capital and Operating Costs

The QP notes that the carbon tax under the output-based pricing system was included in the mining costs and assessed based on the carbon prices currently legislated; that is, a progressive increase to C\$50/t CO_{2eq} in 2022 with no further increase.

22.0 Economic Analysis

22.1 Methodology Used

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

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

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

22.2 Financial Model Parameters

22.2.1 Mineral Reserves and Mine Life

The mine plan is based on the Mineral Reserves in Section 15. The operations have an estimated 22-year mine life. The financial model includes an additional year to account for discounted closure costs extending through to end of closure period.

22.2.2 Metallurgical Recoveries

The metallurgical recovery assumptions and basis are outlined in Section 13. The average LOM recovery used in the economic analysis is 91.9%.

22.2.3 Metal Prices and Exchange Rates

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

22.2.4 Gross Gold Revenue

Gross gold revenue consists of inflows from the sale of gold before any refining and transport costs and royalties.

22.2.5 Transport and Refining Charges

Doré transport and refining charges are based on existing agreements and fluctuate based on number of gold shipments, shipment volume, and gold content.

22.2.6 Net Gold Revenue

Net gold revenue is gross revenue after transport and refining charges.

22.2.7 Capital and Operating Costs

The capital and operating cost estimates were included in Section 21. Mining operating costs are presented with the adjustment for deferred stripping.

22.2.8 Royalties

Royalties included in the economic analysis are:

- Franco–Nevada: 2% net smelter return;
- First Nations payments.

22.2.9 Working Capital¹

Changes in working capital include:

- Change in inventories of ore stockpiles, gold-in-circuit, and doré (“Change in inventory” above Operating Margin)
- Changes in accounts payables, accounts receivables, and supplies inventory.

The economic model assumes four days for accounts receivables, 30 days for accounts payable, and 27 days of supply inventory. These assumptions were based on recent operating history.

Changes in working capital in the initial stages of the mine life reflect accumulation of ore stockpiles. Depletion of these stockpiles starts in 2037 with termination of ex-pit mining in 2038. Gold-in-circuit and doré inventory are depleted and sold in the last year of production, which is 2042.

22.2.10 Taxes

Taxes included in the economic evaluation are the Federal Income tax (15%), Provincial Income Tax (10%), and the Ontario Mining Tax. Depreciation schedules based on current depreciable balances and yearly capital additions were used to model tax depreciation for processing and transportation assets as well as mining assets.

¹ Refer to Cautionary Statement on Non-IFRS Financial Performance Measures.

The tax model was completed at the Project level, which has the Detour Lake Mine as a stand-alone operating asset.

22.2.11 Closure Costs and Salvage Value

Closure costs are based on reclamation schedule extending through to the next centuries up to year 2337. Progressive reclamation occurs throughout the operating period. Reclamation activities are broken down into active closure, passive closure/flooding of the mine pit, final closure/ active discharge, and post closure/passive discharge. Costs extending beyond 2043 were discounted back to 2043 at the Project discount rate and included in that year. Reclamation costs excluded from the Asset Retirement Obligation (approximately 20% of total) are included in site administration costs.

No salvage value of assets was factored into the economic model.

22.2.12 Lease Payments

Lease payments reflect payments associated with Right of Use Assets recognized under International Financial Reporting Standards (IFRS) 16.

22.2.13 Financing

The base case economic analysis assumes 100% equity financing and is reported on a 100% project ownership basis.

22.2.14 Inflation

The base case economic analysis assumes constant prices with no inflationary adjustments. Capital and operating costs are expressed in 2021 Canadian dollars.

22.3 Economic Analysis

The cumulative free cash flow before tax¹ is estimated at \$11,141 M. The cumulative free cash flow after tax ¹ is \$8,354 M.

At a 5% discount rate, the net present value of free cash flows before tax is \$6,614 M and of free cash flow after tax is \$4,968 M.

Internal rate of return and payback period results are not relevant as the cumulative discounted after-tax free cash flows are never negative. This reflects the fact that the Detour Lake Mine is already in operation and that operating cash flows are sufficient to cover sustaining and growth capital requirements.

¹ Refer to Cautionary Statement on Non-IFRS Financial Performance Measures.

Table 22-1 is a summary of the discounted cash flow analysis. Free cash flows in years 2027–2029 are lower due to a combination of lower head-grades due to the mining position and concurrent construction of TMA Cells 2 and 3. Negative free cash flow in 2043 reflects discounted closure costs with no further operational revenue.

Higher operating cash cost (US\$/oz) ¹ and cash all-in sustaining costs (AISC; in US\$/oz) ¹ in the later stages of the mine plan (2039–2042) reflect the impact of changes in inventory with the depletion of ore stockpiles and lower plant head grade.

22.4 Sensitivity Analysis

A sensitivity analysis was performed considering variations in gold price, exchange rate, operating and capital costs. Flexing based on gold grade processed was excluded because it reflects the same sensitivity as gold price (given flat gold price assumption). Results are shown in Figure 22-1. Sensitivity of the Project to changes in gold price and exchange rate are shown in Table 22-2; the project has positive after tax net present value under the Base Case (US\$1,500/oz and 1.31 C\$/US\$) and under the assumptions of Mineral Reserve estimation (US\$1,300/oz and 1.31 C\$/US\$). The sensitivity to discount rate and the assumed discount rate range is shown in Figure 22-2.

The undiscounted free cash flow after tax ¹ is negative at a gold price of US\$895/oz. The net present value of free cash flow after tax¹ is negative at a gold price of US\$940/oz. The Project is most sensitive to changes in the gold price and exchange rate, less sensitive to operating cost changes, and least sensitive to changes in the capital cost assumptions.

22.5 Comments on Economic Analysis

The QP reviewed the financial analysis. The Project has positive economics until the end of the LOM plan, which supports Mineral Reserve declaration.

The QP notes the following:

- While there is a history of silver in doré payments, silver is not estimated in the Mineral Resources or Mineral Reserves, and therefore not included in the financial analysis. Payments for silver in doré represent a minor upside to the Project.
- The tax model assumes Detour Lake Mine is a stand-alone tax entity. Corporate tax synergies with other Kirkland Lake Gold mining operations in Ontario are not included in the economic analysis.

¹ Refer to Cautionary Statement on Non-IFRS Financial Performance Measures.

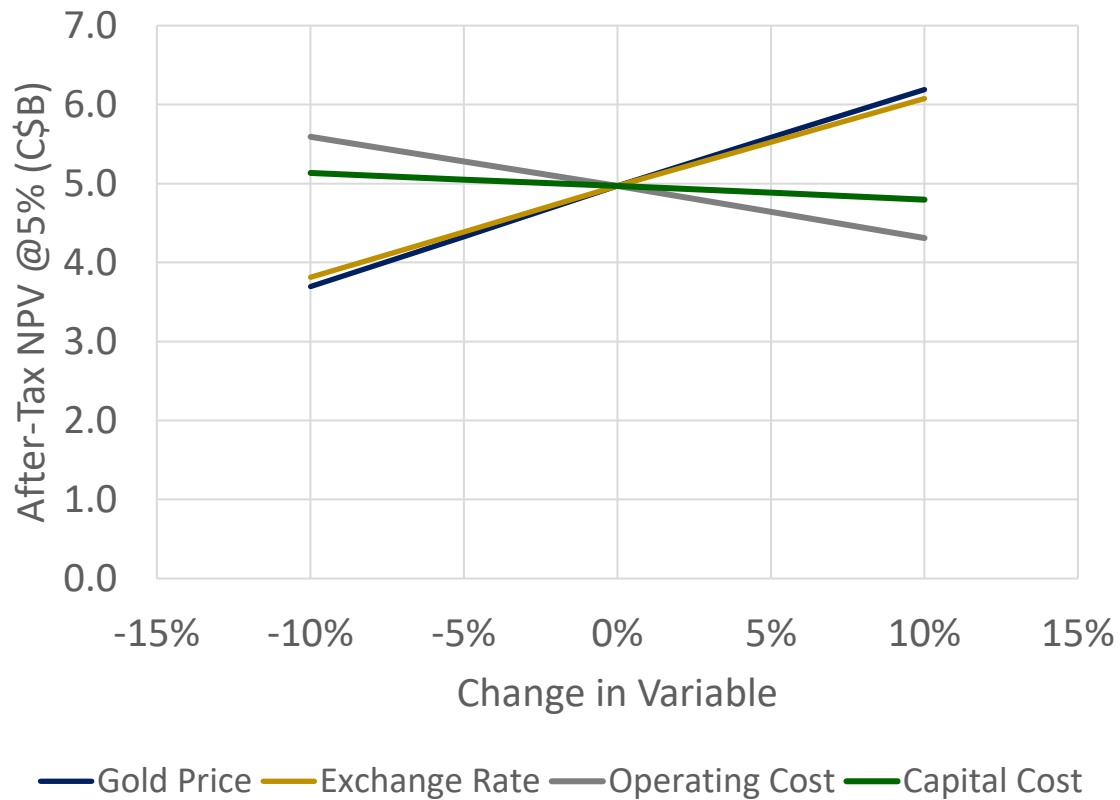
Table 22-1: Cash Flow Analysis

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Total LOM		
Physicals																										
Mining																										
Ore mined (Mt)	25.3	40.1	42.9	45.6	32.5	27.6	23.5	24.5	32.3	35.2	43.0	45.0	42.4	37.8	35.8	32.8	16.3	11.2	—	—	—	—	—	—	593.9	
Waste mined (Mt)	75.7	69.0	70.1	74.0	98.1	102.7	106.6	108.4	95.0	76.1	63.5	51.3	36.2	32.6	26.7	22.5	14.1	8.9	—	—	—	—	—	—	1,131.4	
Ex-pit mined (Mt)	101.0	109.2	112.9	119.6	130.6	130.3	130.1	132.8	127.2	111.3	106.5	96.3	78.6	70.4	62.5	55.3	30.4	20.1	—	—	—	—	—	—	1,725.3	
Strip ratio (waste/ore)	2.99	1.72	1.63	1.62	3.02	3.72	4.53	4.43	2.94	2.16	1.47	1.14	0.85	0.86	0.74	0.68	0.86	0.79	—	—	—	—	—	—	1.90	
Ex-pit ore grade (g/t)	1.00	0.74	0.71	0.70	0.89	0.90	0.89	0.67	0.68	0.76	0.79	0.86	0.89	0.91	0.92	0.98	0.74	0.94	—	—	—	—	—	—	0.82	
Processing																										
Milled (Mt)	24.5	25.5	27.0	27.8	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	16.2	—	—	597.0	
Head grade (g/t)	0.97	0.93	0.87	0.87	0.96	0.89	0.82	0.63	0.73	0.85	0.97	1.10	1.09	1.08	1.07	1.07	0.63	0.67	0.40	0.47	0.44	0.44	—	—	0.82	
Recovery (%)	92.3	92.1	91.8	91.7	92.2	92.1	92.0	90.8	91.1	91.6	92.2	92.7	92.8	92.8	92.6	92.6	91.0	91.2	89.6	90.0	90.1	90.0	—	—	91.9	
Gold recovered (koz)	706	706	691	715	800	735	676	518	596	701	808	916	915	902	890	896	517	549	326	379	354	204	—	—	14,499	
Gold poured (koz)	706	706	691	715	800	735	676	518	596	701	808	916	915	902	890	896	517	549	326	379	354	223	—	—	14,518	
Sales																										
Gold price (C\$/oz)	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	1,965	—	—	1,965	
Gold sold (koz)	706	706	691	715	800	735	676	518	596	701	808	916	915	902	890	896	517	549	326	379	354	224	—	—	14,519	
Cash Flow (C\$M)																										
Gross gold revenues	1,388	1,386	1,357	1,406	1,572	1,445	1,327	1,017	1,171	1,378	1,587	1,800	1,797	1,772	1,749	1,761	1,016	1,078	640	745	695	441	—	—	28,530	
Transportation and refining charges	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(1)	(1)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(1)	(1)	(1)	(1)	(1)	(0)	—	—	(32)	
Net Gold Revenues	1,386	1,385	1,356	1,404	1,570	1,443	1,326	1,016	1,170	1,376	1,585	1,798	1,795	1,770	1,747	1,759	1,015	1,077	640	744	694	440	—	—	28,497	
Site operating costs – mining ¹	(214)	(232)	(305)	(288)	(182)	(174)	(169)	(241)	(300)	(286)	(307)	(318)	(296)	(302)	(259)	(235)	(163)	(148)	(58)	(60)	(51)	(31)	—	—	(4,619)	
Site operating costs – processing	(206)	(206)	(208)	(214)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(249)	(145)	—	—	(5,209)	
Site operating costs – site administration	(105)	(101)	(100)	(99)	(102)	(103)	(102)	(108)	(106)	(100)	(100)	(101)	(102)	(100)	(100)	(62)	(67)	(60)	(53)	(53)	(50)	(32)	(5)	—	(1,910)	
Subtotal site operating costs	(525)	(538)	(613)	(601)	(533)	(525)	(520)	(597)	(655)	(635)	(655)	(668)	(647)	(651)	(607)	(546)	(478)	(457)	(360)	(362)	(350)	(208)	(5)	—	(11,738)	
Royalties and First Nations payments	(39)	(39)	(38)	(39)	(44)	(40)	(37)	(23)	(27)	(39)	(44)	(50)	(50)	(50)	(49)	(49)	(23)	(25)	(15)	(17)	(16)	(10)	—	—	(765)	
Changes in inventory	11	77	123	107	9	1	(11)	35	67	53	87	106	91	92	51	28	(43)	(81)	(213)	(232)	(227)	(165)	—	—	(35)	
Operating Margin ²	833	885	827	870	1,002	879	757	430	555	756	972	1,187	1,189	1,161	1,141	1,192	470	514	52	133	100	58	(5)	—	15,959	
Capital expenditures	(451)	(455)	(333)	(335)	(405)	(459)	(453)	(354)	(239)	(239)	(209)	(139)	(174)	(124)	(111)	(67)	(46)	(42)	(34)	(26)	(28)	(20)	—	—	(4,744)	
Reclamation (asset retirement obligation)	(2)	(2)	(2)	(2)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(3)	(3)	(3)	(3)	(3)	(1)	(13)	(19)	(20)	(7)	(2)	(15)	—	(104)	
Lease payments	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(0)	-	—	(12)	
Less: changes in working capital ²	(12)	(77)	(123)	(107)	(11)	1	12	(32)	(69)	(56)	(89)	(109)	(91)	(92)	(51)	(28)	50	80	217	231	228	171	(2)	—	41	
Free Cash Flow Before Taxes ²	368	351	369	425	584	419	316	43	246	460	673	935	920	943	976	1,093	473	538	215	317	293	206	(21)	—	11,141	
Federal income tax	—	—	—	(79)	(80)	(62)	(43)	(8)	(40)	(71)	(105)	(141)	(142)	(140)	(140)	(148)	(53)	(60)	—	(5)	(4)	(0)	3	—	(1,317)	
Provincial income tax	(10)	(11)	(1)	(55)	(53)	(41)	(29)	(5)	(27)	(47)	(70)	(94)	(94)	(94)	(93)	(98)	(35)	(40)	—	(4)	(3)	(0)	2	—	(902)	
Ontario mining tax	(7)	(27)	(23)	(27)	(24)	(15)	(11)	(2)	(11)	(19)	(41)	(67)	(66)	(64)	(61)	(67)	(14)	(16)	—	(3)	(3)	(1)	—	—	(568)	
Free Cash Flow After Taxes ²	352	313	345	264	428	301	234	28	168	322	457	634	619	645	682	779	371	423	215	305	283	204	(16)	—	8,354	
Discounted free cash flow before tax	360	326	327	358	469	321	230	30	162	290	403	534	500	488	481	513	211	229	87	122	108	72	(7)	—	6,614	
Discounted Free Cash Flow After Tax	344	291	306	222	343	230	170	20	111	203	274	362	336	334	336	366	166	180	87	118	104	71	(5)	—	4,968	
Cumulative Discounted Free Cash Flow After Tax	344	635	940	1,162	1,506	1,736	1,907	1,926	2,038	2,240	2,514	2,876	3,212	3,546	3,882	4,247	4,413	4,593	4,680	4,798	4,902	4,973	4,968	—	—	4,968
Operating cash cost (US\$/oz) ²	556	499	542	528	500	544	600	829	753	633	537	468	464	473	477	441	770	749	1,342	1,196	1,247	1,268	—	—	619	
Cash AISC (US\$/oz) ²	844	780	792	741	726	844	904	1,278	1,088	905	735	597	623	597	615	541	872	843	1,458	1,285	1,342	1,373	—	—	821	

Note: 1. Includes adjustment for deferred stripping. 2. Refer to Cautionary Statement on Non-IFRS Financial Performance Measures.



Figure 22-1: Sensitivity of After-Tax Net Present Value to Gold Price, Exchange Rate, Operating Cost, and Capital Cost

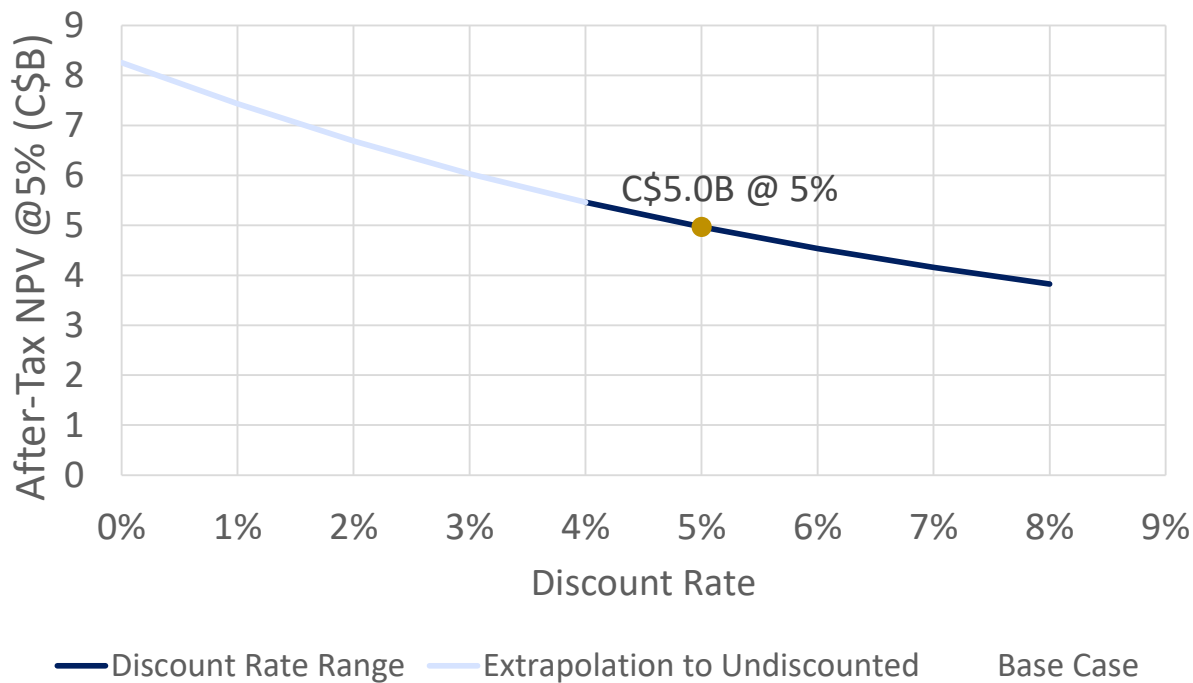


Note: Figure prepared by Kirkland Lake Gold, 2020.

Table 22-2: Sensitivity of After-Tax Net Present Value to Gold Price and Exchange Rate

After Tax NPV @ 5% (C\$M)			Exchange Rate (CAD/USD)				
			-0.10	-0.05	Base	+0.05	+0.10
			1.21	1.26	1.31	1.36	1.41
Gold Price (USD/oz)	-200	1,300	2,480	2,856	3,248	3,647	4,023
	-100	1,400	3,280	3,711	4,118	4,523	4,936
	Base	1,500	4,085	4,522	4,968	5,393	5,816
	+100	1,600	4,870	5,331	5,786	6,238	6,689
	+200	1,700	5,631	6,114	6,596	7,077	7,554

Figure 22-2: Sensitivity of After-Tax Net Present Value to Discount Rate



Note: Figure prepared by Kirkland Lake Gold, 2020.

23.0 Adjacent Properties

There are no adjacent properties that are relevant to this Report.



24.0 Other Relevant Data and Information

This section is not relevant to this Report.

25.0 Interpretation and Conclusions

25.1 Introduction

The QPs note the following interpretations and conclusions in their respective areas of expertise, based on the review of data available for this Report.

25.2 Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

Information obtained from Kirkland Lake Gold experts supports that the mineral tenure held is valid, and the granted mining lease is sufficient to support a declaration of Mineral Resources and Mineral Reserves.

Kirkland Lake Gold has 30 leases and 10 patents totaling 18,574.442 ha of surface rights on the Detour Lake Project. The surface rights are sufficient for all surface infrastructure and mine operation.

Surface run-off that is captured at the operations provides the process water. This source is sufficient for the LOM plan.

Certain of the claims are subject to a 2% royalty payable to Franco-Nevada Corporation. This royalty is included in the cash flow analysis. Other claims are subject to royalties to third-parties but these claims do not fall within the area of the estimated Mineral Resources and Mineral Reserves. Kirkland Lake Gold has certain payments to First Nations groups in the area of the estimated Mineral Resources and Mineral Reserves; these payments are included in the economic analysis. The Detour Lake Operations are not subject to any other back-in rights payments, agreements or encumbrances.

To the extent known, there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the Project that have not been discussed in this Report.

25.3 Geology and Mineralization

The Detour Lake and West Detour deposits are considered to be examples of orogenic greenstone-hosted hydrothermal lode gold deposits.

The geological understanding of the settings, lithologies, and structural and alteration controls on mineralization in the different zones is sufficient to support estimation of Mineral Resources and Mineral Reserves. The geological knowledge of the area is also considered sufficiently acceptable to reliably inform mine planning.

The mineralization style and setting are well understood and can support declaration of Mineral Resources and Mineral Reserves.

Exploration potential remains in the area where Mineral Resources are estimated. The Main and Quartz Hangingwall Zones in the Detour Lake deposit remain open at depth. The West Detour mineralization has potential be extended both to the west and at depth. The

North Pit also has potential for depth and along strike extension, as does the 58N Zone and Zone 75.

25.4 Exploration, Drilling and Analytical Data Collection in Support of Mineral Resource Estimation

The exploration programs completed to date are appropriate for the style of the deposits on the Project.

Sampling methods are acceptable for Mineral Resource and Mineral Reserve estimation.

Sample preparation, analysis and security are generally performed in accordance with exploration best practices and industry standards.

The quantity and quality of the lithological, geotechnical, collar and down-hole survey data collected during the exploration and delineation drilling programs are sufficient to support Mineral Resource and Mineral Reserve estimation. The collected sample data adequately reflect deposit dimensions, true widths of mineralization, and the style of the deposits. Sampling is representative of the gold grades in the deposits, reflecting areas of higher and lower grades.

The QA/QC programs adequately address issues of precision, accuracy and contamination. Drilling programs since 1993 typically included blanks, duplicates and standard samples. QA/QC submission rates meet industry-accepted standards.

The data verification programs concluded that the data collected from the Project adequately support the geological interpretations and constitute a database of sufficient quality to support the use of the data in Mineral Resource and Mineral Reserve estimation.

25.5 Metallurgical Testwork

Metallurgical testwork and associated analytical procedures were appropriate to the mineralization type, appropriate to establish processing routes, and were performed using samples that are typical of the mineralization styles found within the Project.

Samples selected for testing were representative of the various types and styles of mineralization. Samples were selected from a range of depths within the deposits. Sufficient samples were taken so that tests were performed on sufficient sample mass.

The variability of the ore in the Main Detour Pit is related to the talc, copper and sulphur content. Processing of 40% talc ore in feed in 2020 using lead nitrate, yielded similar recoveries as non-talc ore. Sulphur content also impacted recovery and blending strategies to avoid feeding the plant with ores over 2% sulphur are in place and have worked successfully.

The recovery equation for the LOM is derived from 2019–2020 plant data. The LOM recovery will follow the 2019–2020 model with a 0.75% improvement forecast starting in 2022 as a result of the various initiatives to improve the recovery are implemented. The lab testwork performed by SGS indicated that the West Detour deposit has similar mineralogy

to that of the Detour Lake deposit with similar recoveries. The same recovery assumptions are therefore used for the West Detour Pit and North Pit mineralization as for the Main Pit.

Recovery factors estimated are based on appropriate metallurgical testwork, and are appropriate to the mineralization types and the selected process routes. The average LOM recovery forecast is 91.9% for the Detour Lake Main, Detour West and North Pits.

25.6 Mineral Resource Estimates

Mineral Resources are reported using the 2014 CIM Definition Standards, and assume both open pit and underground mining methods.

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

There is upside potential for the estimates if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories.

25.7 Mineral Reserve Estimates

Mineral Reserves are reported using the 2014 CIM Definition Standards and are based on open pit mining methods.

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

There is upside potential for the estimates if mineralization that is currently classified as Mineral Resources potentially amenable to underground mining methods can be converted to Mineral Reserves following appropriate technical studies.

25.8 Mine Plan

The mining operations use conventional open pit mining methods and equipment.

Mining is based on a phased approach with stockpiling to bring high-grade forward and provide operational flexibility.

There are a total of nine phases designed for the LOM: five for the Detour Lake Main Pit, three for the West Detour Pit, and one for North Pit.

The mine production schedule forecasts a total 1,725 Mt to be mined over a period of 18 years (2021–2038). A total of 597 Mt of ore is planned to be milled over a period of 22 years (2021–2042); with the last four years of production supported by long-term stockpile reclaim.

The optimized and variable cut-off strategy combined with 158 Mt of stockpile capacity, results in an average LOM stripping ratio of 1.90.

25.9 Recovery Plan

The process methods are conventional to the industry. The comminution and recovery processes are widely used in the industry with no significant elements of technological innovation.

The process plant flowsheet design was based on testwork results, previous study designs and industry standard practices.

The process facilities in use are appropriate to the mineralization styles.

With the upturn of current performance of the processing plant, ongoing optimization efforts and some new capital initiatives, the LOM plan assumes that the plant throughput will increase from 23 Mt/a in 2020 to 28.0 Mt/a in 2025 and thereafter. Various initiatives have been developed to bring the plant to the 28 Mt/a throughput rate.

The plant will produce variations in recovery due to the day-to-day changes in ore type or combinations of ore type being processed. These variations are expected to trend to the forecast recovery value for monthly or longer reporting periods.

25.10 Infrastructure

All key infrastructure is built for the Detour Lake Operations. Projects were ongoing through 2020 which included construction of additional camp capacity, construction of an airfield and aerodrome, construction of an onsite assay laboratory, construction of additional mobile maintenance offices and shops, and construction of additional exploration facilities.

Potable water is supplied from lake and groundwater sources. Fresh water is sourced from a lake. Process water is recycled from the TMA.

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

25.11 Environmental, Permitting and Social Considerations

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

Kirkland Lake Gold conducts ongoing monitoring and annual reporting under the terms of its permits and approvals.

Tailings are stored in at surface in engineered TMA located east of the process plant. The TMA consists of three cells being developed in a planned, progressive manner. The TMA is designed to function as three independent cells for tailings and water management. Tailings, tailings slurry water, and water reclaimed for the operation of the process plant are managed through the TMA. Inspection and monitoring is performed during construction and operation of the tailings dams to assess their performance and safety; and to verify that actual conditions are consistent with the design assumptions and intentions.

Environmental protection is ensured through the water management network, which collects seepage and runoff from all mine waste facilities through a system of ditching, pumping, and pipeline infrastructure. The modular design allows for the addition of treatment facilities if required.

All permits required for the current Detour Lake Main Pit are in place. Prior to development of the West Detour project, a number of Provincial and Federal environmental approvals, or amendments to existing approvals, will be required. The completion of the West Detour ESR process is anticipated for 2021. The environmental approval applications will provide additional detail regarding the engineering design of the proposed West Detour project facilities, potential effects and proposed mitigations measures. No changes were expected to the approvals list at the Report effective date.

As per the Detour Lake Mine Closure Plan Amendment 2, the total estimated closure cost for the Detour Lake Operations at peak development (i.e., all facilities constructed) is \$147,734,282, exclusive of the West Detour Project. Security provided to ENDM to date for the present stage of development totals \$103,718,794. Financial assurance for the West Detour project will be formalized with the filing of Closure Plan Amendment 3, anticipated for Q4 2021/Q1 2022.

Kirkland Lake Gold has undertaken ongoing consultation with the public, government regulators and its Indigenous partners regarding the operations, environmental commitments and planned activities. The company has established firm consultation principles. These principles continue to guide interactions within mine permitting, operations, and exploration.

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

25.12 Markets and Contracts

Doré from the mine is readily marketable, and contracts are in place for doré sales.

Commodity prices used in Mineral Resource and Mineral Reserve estimates are set by Kirkland Lake Gold at the corporate level. The current gold price provided for Mineral Reserve estimation is US\$1,300/oz, and US\$ 1,500/oz for Mineral Resource estimation. Both Mineral Resource and Mineral Reserve estimates use an exchange rate assumption of 1.31 C\$/US\$.

Kirkland Lake Gold has a number of contracts, agreement and/or purchase orders in place for supply and services that are material to the operation. All contracts or agreements are negotiated with vendors and have a contractual scope, terms and conditions. Contracts are negotiated and renewed as needed. Contract terms are considered to be within industry norms, and typical of similar contracts in Canada with which Kirkland Lake Gold is familiar.

25.13 Capital Cost Estimates

Capital costs consist largely of mining equipment (replacements, additions, component replacements, capitalized maintenance), construction of tailings cells and dam raises, deferred stripping using a by-phase approach, and processing plant projects to increase plant capacity to 28 Mt/a.

Capital cost estimates are acceptable to support declaration of Mineral Reserves.

The LOM plan estimated total capital cost is C\$4,744 million.

25.14 Operating Cost Estimates

Operating costs for are based on actual costs seen during operations at site and are projected through the LOM plan. The consumables for the operation are based on current prices or contracts for future years. In general, approximately 80% of operating costs are based in Canadian dollars and 20% have US dollar exposure. The exchange rate used in the financial model is 1.31 C\$/US\$.

Operating cost estimates are acceptable to support declaration of Mineral Reserves.

The LOM plan estimated total operating cost is C\$12,538 million.

The LOM unit cost in C\$/t mined ¹ is C\$3.47/t mined.

The LOM unit cost in C\$/t milled ¹ is C\$21.00/t milled.

The LOM unit cost in C\$/oz sold ¹ is C\$864/oz sold.

25.15 Economic Analysis

The cumulative free cash flow before tax ¹ is estimated at \$11,141 M. The cumulative free cash flow after tax¹ is \$8,354 M. At a 5% discount rate, the net present value of free cash flows before tax is \$6,614 M and of free cash flow after tax is \$4,968 M. Internal rate of return and payback period results are not relevant as the cumulative discounted after-tax free cash flows are never negative. This reflects the fact that the Detour Lake Mine is already in operation and that operating cash flows are sufficient to cover sustaining and growth capital requirements.

The Project is most sensitive to changes in the gold price and exchange rate, less sensitive to operating cost changes, and least sensitive to changes in the capital cost assumptions.

25.16 Risks and Opportunities

The major risks to the Detour Lake Operations are associated with:

- Negative variations to the gold and diesel price assumptions;
- Significant additional dilution or ore losses;
- Significant delays in the assumed permitting timeline for the West Detour project;
- Changes in the geotechnical assumptions;
- Lower than planned plant production capacity.

The major opportunities are:

- The additional mineralization in the updated West Detour model represents potential Project upside. There is potential to redesign the Detour Lake and Detour West open pits to convert some or all of those Indicated Mineral Resources to Mineral Reserves, and thus revise the mine plan and potentially increase the mine life. However, mining studies such as assessment of tailings and waste rock storage capacities, optimized pit planning and consideration of any future permitting requirements will have to be considered in such a conversion;
- Further improvements in the grade control processes with the installation of an assay laboratory at the mine site;
- Increased level of automation in the mine operation (upgrade of the mine network to LTE enables higher level of automation);

¹ Refer to Cautionary Statement on Non-IFRS Financial Performance Measures.

- Use of alternative energy sources to diesel with the intent of improving business sustainability and competitiveness.

25.17 Conclusions

Under the assumptions presented in this Report, the Project has a positive cumulative discounted free cash flow after tax ¹, and Mineral Reserve estimates can be supported.

¹ Refer to Cautionary Statement on Non-IFRS Financial Performance Measures

26.0 Recommendations

26.1 Introduction

A two-phase work program is proposed. The two phases can be conducted concurrently. The total estimated budget is C\$106.4 million.

26.2 Mine Planning

The mine plan should be updated to incorporate Mineral Resource estimates for the expanded West Detour area. This will require review and consideration of, amongst other mining and technical parameters:

- WRSF and TSF storage capacity. If there is insufficient capacity in the currently-permitted facilities, then potential locations for any additional WRSF and TSF footprints will need to be considered, as well as the likelihood of permitting such facilities;
- Review of geotechnical and hydrogeological parameters given the likelihood of an expanded pit that would join the West Detour and Detour Lake pits;
- Pit optimization and scheduling;
- Additional infrastructure requirements;
- Capital and operating costs;
- Revised project economics.

This is estimated to require a budget of C\$2 M to complete.

26.3 Exploration

Kirkland Lake Gold has had considerable exploration success in the near-mine area. The current drill programs should be continued, to test for additional mineralization that could potentially support Mineral Resource estimation. Areas that should be drill tested include:

- Mineralization at depth below the 800 m Level;
- Mineralization continuing along strike and downplunge to the west of the West Detour open pit

Regional exploration drilling is also recommended further east and west of the pits along the Sunday Lake Deformation Zone. Other exploration drill targets include the Lower Detour area along the Lower Detour and Massicotte Deformation Zones in the vicinity of the 58N zone.

The near-mine and regional exploration programs assume drilling of 430,000 m at an all-in cost of C\$243/m, for a total program cost of C\$104.4 million.

27.0 References

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DETOUR LAKE MINE

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Ontario, Canada
NI 43-101 Technical Report

Watts, Griffis and McOuat Limited, 2011, Technical Report and Mineral Resource Update on the Block A Property, Ontario, Canada for Trade Winds Ventures Inc. February 14, 2011.

Appendix A

Tenure Number	Lease-Patent	Rights	Status	Due Date	Hectares	Pin Number	Ownership	Royalty (Y/N)
LEA-107174	Lease	M & S	Renewal in process	2019-Apr-30	269.16	65475-0021(LT)	(403804) Detour Gold Corporation	Y
LEA-107392	Lease	M & S	Active	2023-Feb-28	331.02	65475-0004(LT)	(403804) Detour Gold Corporation	Y
LEA-107393	Lease	M & S	Active	2023-Mar-31	391.59	65475-0011(LT)	(403804) Detour Gold Corporation	Y
LEA-107394	Lease	M & S	Active	2023-Feb-28	301.96	65475-0005(LT)	(403804) Detour Gold Corporation	Y
LEA-107395	Lease	M & S	Active	2023-Feb-28	424.13	65475-0024(LT)	(403804) Detour Gold Corporation	Y
LEA-107396	Lease	M & S	Active	2023-Feb-28	352.27	65475-0025(LT)	(403804) Detour Gold Corporation	Y
LEA-107397	Lease	M & S	Active	2023-Mar-31	268.65	65475-0027(LT)	(403804) Detour Gold Corporation	Y
LEA-107398	Lease	M & S	Active	2023-Feb-28	370.87	65475-0026(LT)	(403804) Detour Gold Corporation	Y
LEA-107399	Lease	M & S	Active	2023-Mar-31	281.93	65475-0006(LT)	(403804) Detour Gold Corporation	Y
LEA-107400	Lease	M & S	Active	2023-Mar-31	349.79	65475-0007(LT)	(403804) Detour Gold Corporation	Y
LEA-107401	Lease	M & S	Active	2023-Mar-31	274.45	65475-0008(LT)	(403804) Detour Gold Corporation	Y
LEA-107402	Lease	M & S	Active	2023-Mar-31	199.50	65475-0009(LT)	(403804) Detour Gold Corporation	Y
LEA-107403	Lease	M & S	Active	2023-Mar-31	404.87	65475-0012(LT)	(403804) Detour Gold Corporation	Y
LEA-107404	Lease	M & S	Active	2023-Mar-31	460.26	65475-0010(LT)	(403804) Detour Gold Corporation	Y
LEA-108269	Lease	M & S	Active	2028-Dec-31	137.56	65475-0014(LT)	(403804) Detour Gold Corporation	N
LEA-108375	Lease	M & S	Active	2030-Apr-30	332.22	65475-0016(LT)	(403804) Detour Gold Corporation	N
LEA-108590	Lease	M & S	Active	2031-Dec-31	501.62	65475-0019(LT)	(403804) Detour Gold Corporation	N
LEA-108591	Lease	M & S	Active	2031-Dec-31	487.31	65475-0018(LT)	(403804) Detour Gold Corporation	N
LEA-108598	Lease	M & S	Active	2031-Oct-31	41.88	65475-0020(LT)	(403804) Detour Gold Corporation	N
LEA-108599	Lease	M & S	Active	2031-Sep-30	31.52	65475-0017(LT)	(403804) Detour Gold Corporation	N
LEA-108893	Lease	M & S	Active	2033-Jun-30	137.53	65475-0047(LT)	(403804) Detour Gold Corporation	N
LEA-108894	Lease	M & S	Active	2033-Jun-30	274.39	65475-0048(LT)	(403804) Detour Gold Corporation	N
LEA-108939	Lease	MRO	Active	2032-Dec-31	276.10	65475-0028(LT)	(403804) Detour Gold Corporation	Y
LEA-108940	Lease	MRO	Active	2032-Dec-31	448.10	65475-0023(LT)	(403804) Detour Gold Corporation	Y
LEA-108941	Lease	MRO	Active	2032-Dec-31	279.18	65475-0022(LT)	(403804) Detour Gold Corporation	Y

Tenure Number	Lease-Patent	Rights	Status	Due Date	Hectares	Pin Number	Ownership	Royalty (Y/N)
LEA-109040	Lease	M & S	Active	2033-Nov-30	4562.94	65475-0049(LT)	(403804) Detour Gold Corporation	Y
LEA-109295	Lease	M & S	Active	2033-May-31	308.84	65475-0030(LT)	(403804) Detour Gold Corporation	Y
LEA-109298	Lease	MRO	Active	2033-May-31	418.04	65475-0031(LT)	(403804) Detour Gold Corporation	N
LEA-109299	Lease	M & S	Active	2033-May-31	728.18	65475-0032(LT)	(403804) Detour Gold Corporation	Y
LEA-109339	Lease	SRO	Active	2032-Dec-31	738.34	65475-0051(LT)	(403804) Detour Gold Corporation	N
LEA-109361	Lease	M & S	Active	2034-Oct-31	1792.77	65475-0050(LT)	(403804) Detour Gold Corporation	Y
LEA-109374	Lease	MRO	Active	2033-May-31	391.02	65475-0029(LT)	(403804) Detour Gold Corporation	N
LEA-109375	Lease	MRO	Active	2033-May-31	501.71	65475-0029(LT)	(403804) Detour Gold Corporation	N
LEA-109376	Lease	MRO	Active	2033-May-31	627.09	65475-0029(LT)	(403804) Detour Gold Corporation	N
LEA-109377	Lease	MRO	Active	2033-May-31	540.96	65475-0029(LT)	(403804) Detour Gold Corporation	N
LEA-109378	Lease	MRO	Active	2033-May-31	452.08	65475-0029(LT)	(403804) Detour Gold Corporation	N
LEA-109379	Lease	MRO	Active	2033-May-31	769.34	65475-0029(LT)	(403804) Detour Gold Corporation	N
LEA-109380	Lease	MRO	Active	2033-May-31	367.58	65475-0029(LT)	(403804) Detour Gold Corporation	N
LEA-109381	Lease	MRO	Active	2033-May-31	585.05	65475-0029(LT)	(403804) Detour Gold Corporation	N
LEA-109382	Lease	M & S	Active	2034-Oct-31	1361.96	65475-0053(LT)	(403804) Detour Gold Corporation	Y
LEA-109400	Lease	MRO	Active	2034-May-31	145.86	65475-0033(LT)	(403804) Detour Gold Corporation	N
LEA-109423	Lease	M & S	Active	2035-Feb-28	385.97	65475-0057(LT)	(403804) Detour Gold Corporation	Y
LEA-109459	Lease	MRO	Active	2035-Mar-31	63.67	65475-0056(LT)	(403804) Detour Gold Corporation	N
LEA-109460	Lease	M & S	Active	2035-Mar-31	1,468.55	65475-0055(LT) 65475-0054(LT)	(403804) Detour Gold Corporation	Y
LEA-109780	Lease	MRO	Active	2039-Feb-28	715.59	65475-0034(LT)	(403804) Detour Gold Corporation	N
PAT-5476	Patent	M & S	Active		42.01	65475-0039(LT)	(403804) Detour Gold Corporation	Y
PAT-5477	Patent	M & S	Active		59.45	65475-0040(LT)	(403804) Detour Gold Corporation	Y
PAT-5478	Patent	M & S	Active		232.12	65475-0041(LT)	(403804) Detour Gold Corporation	Y
PAT-5479	Patent	M & S	Active		232.12	65475-0036(LT)	(403804) Detour Gold Corporation	Y
PAT-5480	Patent	M & S	Active		18.95	65475-0037(LT)	(403804) Detour Gold Corporation	Y
PAT-5481	Patent	M & S	Active		27.12	65475-0038(LT)	(403804) Detour Gold Corporation	Y
PAT-5482	Patent	M & S	Active		35.84	65475-0038(LT)	(403804) Detour Gold Corporation	Y
PAT-5483	Patent	M & S	Active		44.83	65475-0038(LT)	(403804) Detour Gold Corporation	Y

Tenure Number	Lease-Patent	Rights	Status	Due Date	Hectares	Pin Number	Ownership	Royalty (Y/N)
PAT-5484	Patent	M & S	Active		67.38	65475-0038(LT)	(403804) Detour Gold Corporation	Y
PAT-5485	Patent	M & S	Active		30.76	65475-0038(LT)	(403804) Detour Gold Corporation	Y

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
102186	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
102789	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
103323	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
103379	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
103760	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
103801	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
103802	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
103814	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
103840	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
104221	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
104222	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
104223	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	200	N
104688	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
104689	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
104741	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
104753	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
104754	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
104946	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
104947	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
104950	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
105245	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	400	Y
105387	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
105398	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
105417	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
105418	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
105516	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
105519	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
105520	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
105954	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	200	N
106191	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
106192	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
106573	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
106574	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
106593	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
106613	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
106683	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
107181	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	400	Y
107249	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
107299	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
107359	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
107573	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
107574	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
107617	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
107620	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
107621	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
107665	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
107700	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
107710	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
107711	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
107909	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
107910	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
108280	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
108302	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
108550	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
108551	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
108552	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
108798	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
108861	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
108862	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
108863	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
109046	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
109332	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
109363	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
109375	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
109399	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
109400	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
109424	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
109914	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
109915	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
110021	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
110187	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
110188	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
110197	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
110328	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
110577	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
110760	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
110799	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
110882	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
110883	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
110916	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
110917	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
111024	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
111154	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
111155	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
111331	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
111332	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
111384	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
111385	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
111429	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
111700	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
111701	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
111702	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
111743	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
111853	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
111884	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
112041	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
112043	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
112044	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
112045	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
112051	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
112068	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
112069	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
112070	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
112341	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
112585	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
113010	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	N
113292	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
113335	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
113559	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
113560	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
113561	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
113717	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	400	Y
113718	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
113723	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
113724	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
113736	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
113947	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
113996	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
113997	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
113998	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
114260	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
114283	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
114310	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
114397	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
114408	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
114409	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
114410	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
114411	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
114412	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
114724	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
114725	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
114726	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
114787	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
115028	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
115120	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
115137	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
115138	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
115139	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
117481	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
117482	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
118112	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
118113	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
118114	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
118132	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
118133	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
118334	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
119522	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
119655	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
119656	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
119850	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
119976	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
119977	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
119978	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	200	N
120049	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
120144	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
120510	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
120796	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
120797	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
120798	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
120799	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
120800	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
120801	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
121319	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
121320	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
121321	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
121322	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
121323	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
121324	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
121388	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
121498	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
121499	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
122553	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
122966	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
123229	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
123326	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
123408	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
123428	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
123486	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
123884	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
123885	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
123969	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
124008	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
124055	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
124089	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
124133	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
124137	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
124138	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
124139	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
125142	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
125143	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
125165	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
125311	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
125361	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
125362	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
126183	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
126554	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
127183	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
127184	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
127295	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
127296	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
127297	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
127298	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
127366	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
127456	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
127457	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
127653	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
127654	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
127655	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
127881	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
127882	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
128152	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
128153	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
128195	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
128196	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
128576	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
128577	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
129218	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
129314	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	200	N
129320	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
129321	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
129339	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
129889	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
130033	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
130034	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	200	N
130035	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
130036	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
130037	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
130261	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	400	Y
130653	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
130826	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
131422	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
131423	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
131424	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
131425	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
131426	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
131427	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
131428	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
131518	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
131730	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
131869	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
131922	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
131979	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
132271	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
132364	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
132395	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
132396	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
132566	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
132569	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
132718	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
132767	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
132788	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
132810	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
132811	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
132812	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
132813	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
132972	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
133013	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
133457	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
133458	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
133459	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
133713	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
133781	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
133782	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
133822	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
133918	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
133921	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
133922	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
133923	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
133924	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
133968	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
133972	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
133989	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
133990	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
133999	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
134019	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/31/2026	400	N
134020	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
134021	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
134022	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
134316	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
134689	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
134731	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
135303	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
135344	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
135392	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
135423	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	200	N
135424	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
135485	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	200	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
135493	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
135494	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
135495	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
135496	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
135497	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
135546	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
135547	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
136139	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
136308	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
136372	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
136378	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
136386	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
136549	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
136550	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
137061	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
137089	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
137090	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
137105	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
137243	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
137405	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
137406	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
137407	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
137422	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	N
137610	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
137611	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
137612	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
137675	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	200	N
137676	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
137677	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
137678	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
137679	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
137680	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
138203	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
138370	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
138524	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
138525	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
138545	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
138744	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
138745	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
138746	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
138884	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
138885	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
138936	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
138937	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
138938	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
138985	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
139123	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
139124	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
139186	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	200	N
139187	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	200	N
139345	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
139506	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
139507	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
139632	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
139650	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
139651	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
139652	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
139653	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
139681	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
139695	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
139698	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
139699	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
139700	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
139834	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
140053	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
140054	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
140219	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
140220	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
140451	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
140540	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
141074	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
141092	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
141520	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
141521	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
141534	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
141630	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
141631	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
141632	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
142167	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
142168	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
142292	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
142293	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
142358	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
142434	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
142580	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
142878	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
143108	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
143146	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
143195	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
143346	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
143347	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
143549	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
143620	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
143678	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
143679	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
143712	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
143713	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
143714	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	400	N
143715	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
143716	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
143963	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
143964	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
144481	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
144845	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
144898	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
144950	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
144951	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
144952	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
144953	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
145102	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
145146	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
145149	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
145150	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
145151	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
145152	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
145169	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
145256	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
145323	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
145652	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
145653	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
145952	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
146180	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	400	N
146184	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
146191	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
146192	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
146400	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
146438	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
146439	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
146450	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
146559	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
146840	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	400	Y
147345	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
147433	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
147434	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
147435	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
147436	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
147437	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
147452	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
147518	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
147805	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
147811	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
147843	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
147903	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
147904	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
147924	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
147934	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
148006	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
148013	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
148014	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
148015	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
148016	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
148017	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
148462	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	400	N
148574	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
148602	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
148627	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
148632	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
148649	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
148650	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
148655	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
148656	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
148657	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
148659	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
148747	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
148757	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
148758	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
149322	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
149389	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
149390	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
149905	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	200	N
149906	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
149941	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
150213	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
150214	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
150530	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
150861	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
150881	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
150929	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
150986	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
150987	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
151422	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	400	Y
151426	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
151448	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
151449	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
151756	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
151868	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
151902	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
152118	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
152132	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
152133	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
152134	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
152180	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	200	N
152207	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
152227	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
152450	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
152605	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
152606	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
152897	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
153199	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
153204	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
153205	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
153394	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
153436	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
153817	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
153818	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
153819	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
153823	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
153835	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
154090	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
154349	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
154350	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
154588	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
155115	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
155617	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
155618	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
155659	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
155887	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
156353	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
156556	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
156562	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
156647	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
156648	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
156665	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
157199	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
157273	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
157318	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
157450	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
157451	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
157452	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
157773	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
158529	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
158575	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
158579	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
158692	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	200	N
159215	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
159216	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
159248	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
159249	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
159261	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
159263	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
159264	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
159269	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
159310	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
159314	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
159989	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
160104	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
160360	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
161707	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
161908	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
161941	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
161942	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
162048	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
162049	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
162050	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
162051	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
162052	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
162107	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
162144	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
162317	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
162427	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
162526	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
162527	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
162642	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
162947	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
162948	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
162949	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
163201	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
163202	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
163260	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	400	N
163261	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	200	N
163271	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
163272	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
163329	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	N
163330	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
163331	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
163354	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
163490	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
163979	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
163981	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	200	N
163982	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
163983	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
163984	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
163985	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
164140	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
164453	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
164496	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
164497	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
164499	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
164680	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
164693	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
165090	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
165091	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
165160	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
165161	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
165246	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
165327	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
165375	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
165970	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
165971	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
166425	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
166426	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
166427	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
166428	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	200	N
166772	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
166773	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
167108	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
167370	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
167426	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
167495	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
167731	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
167821	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
167822	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
167842	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
167955	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
167956	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
168181	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
168393	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
168486	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
168556	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
168557	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
168704	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
168705	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
168751	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	200	N
168778	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
168800	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/31/2026	400	N
169279	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
169280	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
169281	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
169328	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
169476	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
169792	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
169793	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
169794	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
170456	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
170457	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
170458	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
171315	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
171340	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
171872	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
171873	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
172308	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
172585	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
172586	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
172591	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
172801	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
173040	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
173045	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
173171	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
173443	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
173473	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
173496	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
173528	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
173703	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
173704	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
173705	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
173706	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
173732	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
173948	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
174163	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
174180	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
174227	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
174243	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
174244	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
174245	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
174246	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
174247	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
174250	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
174265	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
174266	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
174519	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
174520	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
174733	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
174734	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
174776	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
174995	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
175034	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
175035	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
175050	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
175404	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
175608	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
175717	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
175791	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
175957	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
176019	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
176432	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
176457	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
176673	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	200	Y
176679	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
176680	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
176692	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	200	N
176693	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	200	N
176800	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
177085	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
177088	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
177089	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
177090	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
177456	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
177871	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
178027	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
178028	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
178029	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
178191	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
178192	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
178235	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
178657	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
178658	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
178932	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
179441	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
179467	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
179834	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
179981	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
179982	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
179983	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
180127	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
180154	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
180679	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
180680	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
180697	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
180749	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
180784	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
180983	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
181169	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
181274	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
181297	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
181298	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
181319	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
181320	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
181477	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
181478	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	400	N
181479	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	400	N
181530	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	200	N
181562	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
182068	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
182224	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
182259	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
182260	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
182296	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
182297	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
182298	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
182316	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
182515	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
182761	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
182878	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
183086	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
183087	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
183263	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
183294	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
183423	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
183426	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
183427	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
183430	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
183431	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
183432	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
183459	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
183460	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
183461	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
184317	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
184318	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
184531	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
184825	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
185013	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
185054	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
185055	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
185414	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
185449	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
185464	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	200	N
185596	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
185620	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
185646	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
185787	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
185892	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
186375	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
186751	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
186860	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
186861	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
187126	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
187127	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
187166	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
187225	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
187226	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
187310	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
187311	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
187336	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
187409	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
187457	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
187458	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
187510	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
187551	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
187635	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
187969	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
188102	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
188116	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
188399	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
188540	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
188997	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
189291	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
189292	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
189301	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
189302	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
189744	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
189757	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
189943	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
190117	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
190220	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
190546	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
190547	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
190850	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
190851	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
190888	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
190889	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
190911	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
190912	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
190913	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
190985	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
191090	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
191091	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
191095	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
191096	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
191271	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
191341	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
191350	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
191477	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
191742	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
191743	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
192130	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
192153	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
192280	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
192281	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
192296	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
192304	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
192307	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
192328	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
192477	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
192688	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
192712	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
193069	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
193122	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
193333	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
194522	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
194566	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
194567	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
194645	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
194646	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
195799	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
195800	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
196145	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
196146	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
196589	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
196590	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
196622	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
196739	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
196740	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
196773	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
196774	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
196779	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
197071	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
197263	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
197299	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
197300	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
197425	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
197453	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
197454	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
197777	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
197786	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
197804	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
197805	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
197991	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
198024	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
198025	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
198026	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
198028	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
198029	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
198033	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
198034	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
198035	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
198036	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
198070	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
198661	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
198662	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
199065	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
199242	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
199243	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
199659	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
199660	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
199661	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
199676	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
199819	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
199820	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
200230	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
200231	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
200273	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
200947	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	400	N
201168	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
201177	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
201279	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
201280	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
201526	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
201527	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
201528	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
201689	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
201692	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2026	200	Y
202193	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
202354	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
202400	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
202462	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
202659	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
202677	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
202758	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
203004	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
203005	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
203320	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
203321	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
203563	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
203631	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
203741	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2026	200	Y

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
203790	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
203898	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
203970	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
203975	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
204248	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
204304	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
204305	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
204446	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
204447	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
204483	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
204502	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
204507	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
204519	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
204520	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
204521	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
204741	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
204781	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
204783	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
205079	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
205217	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
205264	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
205481	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
205949	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
206057	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
206068	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
206144	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
206216	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
206737	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
206937	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
207125	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
207155	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
207246	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
207756	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
208427	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
209257	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
209655	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
209656	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
209702	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
209703	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
209748	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
209749	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
209777	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
209778	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
209814	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
209815	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	200	N
209816	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
209916	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
209932	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
210197	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
210198	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
210384	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
210401	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
210688	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	N
210940	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
210941	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
210942	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
210943	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
211221	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
211783	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
211784	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
211785	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
211789	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
211790	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
211791	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
211807	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
211976	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
212523	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
212559	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
212569	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
212570	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
213030	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
213031	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
213263	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
213687	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
213688	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
213689	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
214396	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
214465	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
214497	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
214498	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
214688	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
214698	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
214699	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
214701	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
214702	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
214703	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
214704	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
215166	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
215167	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
215615	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
215616	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
215617	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
215964	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
216057	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
216058	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
216092	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
216093	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
216138	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
216139	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
216222	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
216223	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
216224	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
216226	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
216485	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
216512	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
216654	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
216655	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
216656	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
216664	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
216698	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
216729	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
216730	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
216731	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
216856	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
216878	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
216879	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
216891	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	400	Y
216896	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
217174	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
217175	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
217309	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
217599	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
217644	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
217650	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
217771	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
218091	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
218114	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
218175	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
218185	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/31/2026	200	N
218188	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
218464	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
218623	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
218740	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
218741	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
219266	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
219271	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
219363	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
219432	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
220468	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
220506	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
220643	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
220800	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
220837	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
221339	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
221464	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
221946	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
221994	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
221995	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
221996	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
222243	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
222355	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
222385	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
222657	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
222661	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	400	Y
222746	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
222896	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
223250	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
223251	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
223270	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
223271	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
223332	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
223333	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
223401	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
224041	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
224354	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
224355	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
224551	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
224584	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
224585	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
224586	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
224743	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
224744	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
224810	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
225189	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
225249	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	200	N
226413	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
226414	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
226433	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
226581	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
226582	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
226583	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
226593	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
226594	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
227217	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
227218	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
227378	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
227379	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
227413	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
227414	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
228487	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
228488	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
228528	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
228595	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
228596	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
228605	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
228606	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
228607	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
228703	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
228704	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
228705	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
228706	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
228758	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
228786	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
228806	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
228807	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
229294	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
229295	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
229413	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
229429	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
229430	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
229431	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
229485	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
229523	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
229524	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
229525	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
229526	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
229653	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
229654	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
229655	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
229693	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
229836	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
229837	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
229978	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
230616	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
230617	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
230694	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
230697	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
230741	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
230754	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
231275	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	200	Y
231278	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
231302	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
231359	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
232183	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
232580	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
232601	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
232602	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
232603	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
232622	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
232623	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
232624	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
232696	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
232767	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
232768	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
233182	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
233213	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
233245	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
233246	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
233372	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
233373	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
233422	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
233423	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
233477	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
233478	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
233479	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
233515	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
233709	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
233710	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
234043	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	400	N
234044	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
234045	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
234551	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
234704	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
234741	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
234781	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	400	N
234794	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
234814	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
234815	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
235150	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
235206	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
235270	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
235271	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
235282	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
235283	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
235284	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
235359	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
235393	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
235509	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
235548	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
235913	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
235914	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
235915	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
236031	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	400	N
236032	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	200	N
236033	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	400	N
236119	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
236120	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
236151	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
236152	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
236178	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
236213	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
236261	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
236696	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
236723	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
236763	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
236764	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
236908	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
237046	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
237047	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
237048	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
237073	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
237074	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
237075	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
237254	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
237255	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
237300	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
237360	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
237393	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
237488	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
237489	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
237490	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
237639	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	200	N
237654	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
237661	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
237923	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
238099	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
238165	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
238306	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
238307	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
238308	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
238309	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
238579	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
238713	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
238714	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
238715	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
238722	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
238743	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
238744	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
238745	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
238746	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
238850	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
238879	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
238954	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
238955	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
238956	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	200	N
239135	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
239136	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
239205	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
239271	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
239553	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
239554	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
239555	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
239556	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	400	N
239557	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
239598	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
239613	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
239719	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
240126	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
240410	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
240411	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
240412	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
240425	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
240426	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
240427	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
240440	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
240766	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
240767	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
240768	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
240812	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
240883	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
240884	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
241153	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
241154	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
241687	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
241726	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
241741	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
241853	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
241854	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
242076	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
242139	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
242510	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
242823	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
242893	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
242894	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
243130	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
243409	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
243410	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
243411	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	200	Y
243412	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
243413	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
243417	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
243433	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
243897	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
243898	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
243899	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
244282	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
244430	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
244431	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
244432	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
244544	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
244744	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
244755	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
244756	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
244770	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
244771	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
244872	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
244893	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
244894	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
245718	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
245904	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	200	N
246207	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
246572	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
246573	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
246711	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
246815	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
246816	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
246853	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
247023	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
247024	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
247025	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
247026	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
247027	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	200	N
247034	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
247035	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
247189	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
247481	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
247482	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
247483	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
247594	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
247595	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
247795	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
247939	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
248012	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
248013	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
248017	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
248018	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
248049	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
248058	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	200	N
248059	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2027	200	N
248060	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
248472	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
248478	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
248497	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
248498	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
248697	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
248801	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
248802	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
248803	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
248809	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
248810	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
248895	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
249260	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
249303	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
249400	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
249472	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
249748	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
249799	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
249814	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
249815	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
250002	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
250003	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
250004	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
250005	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
250006	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
250099	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
250746	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
250748	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
250749	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
250750	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
250770	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	200	N
250844	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
250845	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
250846	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
251197	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
251198	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
251199	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
251257	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
251313	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
251314	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
251315	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
251357	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
251380	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
251382	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
251395	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
251396	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
251398	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
251401	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
251402	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
251603	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
252038	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
252039	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
252095	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
252096	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
252113	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
252114	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
252125	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
252128	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
252220	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
252313	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
252447	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
252490	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
252730	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
252768	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	200	N
252866	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
252935	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2025	200	N
252943	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
252944	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
252958	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
252959	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
253226	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
253369	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
253680	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
253839	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
253959	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
253960	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
253961	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
253992	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
254050	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
254246	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
254282	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
254433	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
254434	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
254435	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
254805	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
254845	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
254846	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
255708	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
255880	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
255881	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
255956	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
255982	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
255983	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
255984	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
255985	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
256080	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
256085	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
256143	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
256253	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
256319	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
256341	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
256990	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
257037	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
257670	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
257700	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
257701	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
257702	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
257877	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
258387	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
258388	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
258389	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
258470	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
258491	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
258527	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	200	N
258528	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
258529	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
258694	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
258709	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
259008	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
259031	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	200	N
259352	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
259353	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	200	N
259807	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
259810	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
259811	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
259954	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
259981	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
260030	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
260042	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
260043	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
260044	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
260479	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
260488	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
260489	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
260494	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
260512	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
260688	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
260689	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
260744	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
261045	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
261046	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
261047	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
261257	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
261258	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
261699	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
261700	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
261701	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
261965	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
262058	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
262078	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
262085	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	400	Y
262462	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
262463	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
262652	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
262653	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
262723	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
262724	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
262788	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
262801	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
263163	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
263310	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
263311	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
263312	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
263313	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
263472	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
263811	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
263819	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
263841	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
263971	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
263992	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
263993	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
264013	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
264014	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
264019	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
264020	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
264075	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	200	N
264076	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	200	N
264077	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
264089	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
264103	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
264121	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
264122	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
264123	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
264447	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
264454	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
264470	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
264718	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
264795	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
264995	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
265236	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
265278	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
265761	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
265921	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
267673	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
267703	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
267704	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
268397	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
268539	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
268552	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
268686	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
268840	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
269450	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
269936	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
270012	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
270049	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
270136	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
270137	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
270138	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
270404	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
270405	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
270406	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
270490	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
270491	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
270515	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
270549	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
270550	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
270697	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
270743	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
270776	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
270787	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
270788	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	400	Y
270793	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
271115	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
271908	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
271971	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
271972	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
271973	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
272031	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
272044	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
272072	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
272073	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
272074	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
272075	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
272418	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
272657	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
272730	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
272731	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
272767	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
273049	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
273069	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
273234	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
274394	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
274405	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
274410	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
274427	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
275125	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
275146	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
275147	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
275202	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
275203	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
275204	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
275205	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
275206	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
275222	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
275265	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
275266	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
275267	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
275673	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
275854	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
275881	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
275882	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
275883	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
275913	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
275928	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
276218	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
276219	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
276483	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
276844	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
277098	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
277099	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
277100	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
277138	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
277155	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
277329	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
277377	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
277597	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
278029	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
278382	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
278383	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
278697	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
279276	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
279277	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
279302	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
279445	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
279446	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
279447	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
279849	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
279850	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
279851	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
280116	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
280627	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
280628	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
280804	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
281184	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	200	N
281417	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
282121	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
282122	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
282123	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
282145	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
282568	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
282569	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
282570	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
283115	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
283116	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
283176	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
283272	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
283273	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
283287	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
283304	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
283336	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
283337	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
283338	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
283408	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
283409	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
283574	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
283764	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
283926	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
283927	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
283928	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
284059	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
284152	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
284153	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
284154	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
284190	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
284191	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
284192	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
284588	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
284589	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
284655	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
284796	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
284876	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
284877	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
284910	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
285229	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
285230	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
285728	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
285729	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
286455	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
286589	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
286590	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
286591	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
286676	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
286677	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
286678	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
286731	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
286796	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
287179	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
287416	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
288022	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
288505	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
288568	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
288569	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
288570	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
288815	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
288943	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
289069	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
289340	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
289341	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
289342	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
289467	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
289468	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
289940	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
290182	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
290557	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
290581	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
290582	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
290583	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
290584	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
290757	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	200	N
290928	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
290929	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
290930	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
291334	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
291352	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
291392	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
291398	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
291431	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
291479	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	200	N
291490	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
291494	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
291495	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2026	200	Y
292116	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
292117	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	400	N
292369	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
292925	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
292926	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
292990	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
293194	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
293195	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
293196	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
293218	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
293388	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	400	Y
293483	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
293594	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
293595	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
293622	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
293623	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
293668	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
294043	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
294691	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
294727	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
294742	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
294790	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
294812	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
295057	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
295058	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
295218	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
295219	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
295309	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
295319	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
295320	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
295450	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
295566	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
295567	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
296035	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
296036	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
296037	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
296604	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
296663	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
297203	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	400	N
297211	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
297844	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
297894	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
297896	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	400	Y
297969	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
297970	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
297971	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
297972	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
298050	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
298556	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
298557	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
298700	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
299321	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
299322	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
299323	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
299504	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
299530	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
299531	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
299819	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
299950	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
300016	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
300040	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	200	N
300120	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
300351	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
300477	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	400	N
300492	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
300575	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
300614	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
300618	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
300619	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
300634	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
300635	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
300831	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
300832	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
300851	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
300867	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
300868	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
300869	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
300870	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
300987	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
301006	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
301007	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
301310	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
301311	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
301455	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
301500	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	200	N
301837	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
301897	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	N
301920	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
301922	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/31/2026	400	N
301923	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
302115	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
302325	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
302739	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
303008	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
303100	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
303245	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
303279	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
303451	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
303452	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
303544	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
304098	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
304104	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
304105	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
304290	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
304291	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
304315	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
304744	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	400	N
304847	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
305059	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
305060	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
305087	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
305088	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
305109	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
305110	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
305111	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
305228	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
305336	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
305337	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
305338	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
305665	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
305680	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
305681	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
305717	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	200	N
305718	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
305719	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
305968	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
306083	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
306472	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
306494	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
306878	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
306914	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
306927	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
307162	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
307317	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
307318	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
307411	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
307419	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
307695	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
307696	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
307753	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
307754	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
307755	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
307756	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
307771	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
307807	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
307808	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
308204	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
308205	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
308238	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
308524	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
308646	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
308647	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
308775	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
309056	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
309057	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
309064	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
309065	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
309066	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
309126	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
309306	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
309307	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
309308	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
309357	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
309421	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
309422	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
309436	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
309941	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
309965	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
310121	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
310123	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	200	N
310124	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
310125	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
310126	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
310273	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
310274	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
310341	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
310350	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
310890	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
310984	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
311524	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	400	N
311525	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
311601	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
311718	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
311719	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
311841	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
311909	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
312373	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
312412	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
312413	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
312414	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
312476	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
312504	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
312941	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
312960	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
313012	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
313013	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
313014	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
313275	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
313318	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
313319	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
313441	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
313578	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
313635	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
313919	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
313920	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
313972	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
314216	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
314217	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
314218	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
314219	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
314453	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
314484	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
314485	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
314486	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
314552	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
314861	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
314920	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
314996	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
314997	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
314998	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
314999	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
315209	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
315255	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
315388	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
315428	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	200	N
315457	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
315749	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
315761	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
315762	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
315834	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
315836	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
316161	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
316162	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	200	Y
316166	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
316167	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
316168	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
316991	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
316992	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
317176	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
317188	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
317189	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	400	Y
317264	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
317265	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
317266	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
317267	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
317483	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
317513	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
317514	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
317515	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
317516	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
317653	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
317805	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
317880	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
317881	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y
317891	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
317893	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	200	Y

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
318100	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
318144	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
318145	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
318634	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
318635	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
318652	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
318653	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2026	200	N
318654	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
318655	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
318942	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
318943	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2025	200	N
319170	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
319300	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
319301	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
319440	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
319669	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
319702	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
319703	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
319715	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
320098	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
320099	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
320100	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
320158	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
320209	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
320259	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
320439	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
320440	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
320502	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
320757	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/3/2027	400	N
320758	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
320805	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
320882	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
321364	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
321365	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
321460	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
321497	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
321836	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
321837	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
321845	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
321846	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2026	400	N
321847	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
322027	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
322028	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
322029	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
322273	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
322296	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
322466	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
322467	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
322468	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
322469	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
322470	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
322473	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
322495	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
322616	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
323786	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
323894	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
323895	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
323896	SCMC	Detour Gold Corporation 100%	Atkinson Lake	10/9/2026	400	N
324253	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
324297	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
324505	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
324617	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
324618	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
324619	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
324732	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
324863	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
324988	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
325084	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
325272	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
325495	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
325496	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
325635	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
326010	BCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
326011	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
326029	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
326678	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
326679	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
326736	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
327106	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
327151	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	400	N
327163	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
327180	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
327306	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
327311	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
327312	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
327608	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
328008	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
328052	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
328432	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
328474	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
328486	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
328613	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
328614	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
328615	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
329370	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
329408	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
329856	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
330068	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
330070	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
330071	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
330072	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	200	Y
330073	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
330074	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2026	400	N
330075	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
330301	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
330382	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
330383	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
330384	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
330439	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
330547	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
330641	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
330642	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
330710	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	400	Y
330714	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
330715	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
330732	BCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	200	Y
330735	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
330739	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
330740	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
330741	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
330983	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
330984	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
331044	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
331447	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
331448	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
331451	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
331452	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
331537	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	200	Y
331556	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
331698	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
331699	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
331703	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	6/3/2027	400	N
331885	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
331892	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
331999	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
332350	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
332351	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
332463	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
332464	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
332480	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
332481	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	200	N
332488	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	9/18/2027	200	Y
332567	BCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	200	N
332568	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
332621	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
332667	SCMC	Detour Gold Corporation 100%	Sunday Lake	7/12/2027	400	Y
332848	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/13/2027	400	Y
332868	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2025	400	N
332885	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
333006	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
333007	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
333067	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
333207	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	200	N
333258	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
333418	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
333419	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
333622	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
334475	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
334476	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
334477	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
334518	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
334644	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
335025	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
335026	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
335105	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
335185	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
335186	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/26/2027	400	N
335536	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
335537	BCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	200	N
335546	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	400	N
335547	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
335703	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
335704	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
335705	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
335886	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
335887	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
335888	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
335896	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
335898	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
335899	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
336098	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
336265	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	5/28/2027	200	Y
336639	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
336942	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/9/2026	400	N
336988	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	200	N
336989	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/25/2027	200	N
337180	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	10/14/2026	400	Y
337192	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	400	N
337493	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
337894	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
337895	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
337896	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
338235	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
338236	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
338238	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	9/22/2026	200	N
338240	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
338241	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
338242	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
338258	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	400	N
338259	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	10/25/2027	200	N
338318	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
338319	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
338320	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
338369	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
338370	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y

Claim Number	Claim Type	Ownership	Township	Anniversary Date	Work Required	Royalty Y/N
338371	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
338372	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2026	400	Y
339028	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
339248	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
339252	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
339253	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
339506	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
339585	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
339586	SCMC	Detour Gold Corporation 100%	Hopper Lake	8/20/2027	400	N
339606	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
339607	BCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	200	N
339724	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
339725	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
339736	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	400	N
339832	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
339833	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
339839	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
339840	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	200	Y
340975	SCMC	Detour Gold Corporation 100%	Hopper Lake	9/8/2026	200	N
341037	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	4/19/2027	400	N
341632	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	6/3/2026	400	N
341706	SCMC	Detour Gold Corporation 100%	Hopper Lake	5/8/2026	200	N
341784	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
342163	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
342226	SCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	400	N
342275	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2025	200	N
342352	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
342360	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
342361	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
342833	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	8/8/2026	400	N
342998	BCMC	Detour Gold Corporation 100%	West of Sunday Lake	3/3/2027	200	N
343072	BCMC	Detour Gold Corporation 100%	Atkinson Lake	4/19/2027	200	N
343184	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	3/11/2027	200	N
343468	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y
343593	SCMC	Detour Gold Corporation 100%	Sunday Lake	4/26/2027	400	N
344412	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	4/23/2027	400	Y
344518	SCMC	Detour Gold Corporation 100%	West of Sunday Lake	8/20/2027	400	N
344892	SCMC	Detour Gold Corporation 100%	Hopper Lake	3/15/2027	400	Y
345379	SCMC	Detour Gold Corporation 100%	Lower Detour Lake	2/24/2027	400	N
345533	BCMC	Detour Gold Corporation 100%	Hopper Lake	5/28/2027	200	Y

Note: SCMC: single cell mining claim. BCMC: boundary cell mining claim.

