# Hislop Property, Ontario, Canada

## Updated NI 43-101 Technical Report

**Effective date of the report: 31 December 2016**
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**Report Addressed to Kirkland Lake Gold Ltd.**

## Important Notice

This Technical Report has been prepared as a National Instrument 43-101 Technical Report, as prescribed in Canadian Securities Administrators' National Instrument 43-101, Standards of Disclosure for Mineral Projects (NI 43-101) for Kirkland Lake Gold Ltd. (Kirkland Lake Gold). The data, information, estimates, conclusions and recommendations contained herein, as prepared and presented by the Authors, are consistent with: the information available at the time of preparation; the data supplied by outside sources, which has been verified by the authors as applicable; and the assumptions, conditions and qualifications set forth in this Technical Report.

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All forward-looking statements in this Technical Report are necessarily based on opinions and estimates made as of the date such statements are made and are subject to important risk factors and uncertainties, many of which cannot be controlled or predicted. Kirkland Lake Gold Ltd. and the

Qualified Persons who authored this report undertake no obligation to update publicly or otherwise revise any forward-looking statements contained herein whether as a result of new information or future events or otherwise, except as may be required by law.

## Non-IFRS Financial Performance Measures

Kirkland Lake Gold has included a non-IFRS measure “total site costs”, “total site costs per ounce” and various unit costs in this Technical Report. The Company believes that these measures, in addition to conventional measures prepared in accordance with IFRS, provide investors an improved ability to evaluate the underlying performance of the Company. The non-IFRS measures are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. These measures do not have any standardized meaning prescribed under IFRS, and therefore may not be comparable to other issuers.

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# SUMMARY

This National Instrument 43-101 technical report (technical report) was triggered by the disclosure from Kirkland Lake Gold Ltd (KLG) of its Annual Information Form (AIF) for the year 2016 (section 4.2 (1) (f) of the Instrument).

This technical report has been prepared for KLG, the beneficial owner of the Hislop Mine. KLG is listed on the Toronto Stock Exchange under the ticker symbol “KL”. This technical report provides the Mineral Resource and Mineral Reserve estimates for the Hislop Mine that have resulted from ongoing exploration and resource definition drilling and as a result of ongoing mine design and evaluation during the period January 1, 2016 to December 31, 2016.

The updated mineral resources and mineral reserves (as of December 31, 2016) are presented in

Summary Table 1 and Summary Table 2 respectively. Mineral resources are exclusive of mineral reserves.

| | Indicated | | | Measured + Indicated | | | Inferred | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) |
| 2016 | 1,150 | 3.59 | 132 | 1,150 | 3.59 | 132 | 797 | 3.76 | 95 |

**Notes**
CIM definitions (2014) were followed in the calculation of Mineral Resource
Mineral Resource estimates were prepared under the supervision of D. Cater, P. Geo.
Mineral Resources were estimated at a block cut-off grade of 2.2 g/t
Mineral Resources are estimated using a long term gold price of US$1,200/oz or C$1,500 / oz
A minimum mining width of 3m was applied
A bulk density of 2.84 t/m$^3$ was used
Totals may not add exactly due to rounding

**Summary Table 1: Mineral resources at the Hislop Mine Complex (as of Dec 31, 2016).**

| **HISLOP MINE ZONE** | **CATEGORY** | **TONNES** | **GRADE** | **OUNCES** |
|---|---|---|---|---|
| THOR ZONE | PROVEN | 0 | 0.00 | 0 |
| THOR ZONE | PROBABLE | 175,545 | 5.80 | 32,744 |
| **TOTALS** | **PROVEN** | **0** | **0.00** | **0** |
| **TOTALS** | **PROBABLE** | **175,545** | **5.80** | **32,744** |
| **TOTALS** | **2 P'S** | **175,545** | **5.80** | **32,744** |

**Notes**
CIM definitions (2014) were followed in the calculation of Mineral Reserves
Mineral Reserves estimates were prepared under the supervision of P. Rocque, P. Eng.
Cut-off grades were calculated for each stopes
Mineral Reserves were estimated using a long term gold price of US$1,200/oz (CDN$1,500)
Totals may not add exactly due to rounding

**Summary Table 2: Mineral reserves at Hislop Mine Complex (as of Dec 31, 2016).**

The open-pit mine ceased operation in 2015 and was placed on care and maintenance.

A mine design was proposed for development of the underground deposit, below the current pit. No other significant changes, besides mineral reserves depletion of the open-pits, occurred since the last technical report.

# 1.0 INTRODUCTION

This National Instrument 43-101 technical report (technical report) was triggered by the disclosure from KLG of its Annual Information Form (AIF) for the year 2016 (section 4.2 (1) (f) of the Instrument). It was prepared by employees of KLG and is addressed to KLG.

This update from the 2009 technical report covers the changes in mineral resources and mineral reserves, mine design and life of mine plan pertaining to the Hislop deposit located in the Taylor Township, Ontario, Canada.

Information was obtained through the field and technical work related to the Hislop deposit over the past several years. Most of that information was derived by KLG employees.

The two qualified persons (QP) visited the Hislop property in 2016 and numerous times since 2010 and participated in the direction of the field and technical work.

The units of measures used in this report conform to the metric system. Unless stated otherwise, the Canadian Dollar (CDN$) is the currency used in this technical report. A list of abbreviations is displayed in Table 1-1.

| Abbreviation | Meaning |
|---|---|
| a | annum |
| CDN$ | Canadian dollar |
| cm | centimetre |
| d | day |
| DDH | diamond drill hole |
| EM | electromagnetic |
| g | gram |
| gpt, g/t | gram per tonne |
| ha | hectare (2.471 acres) |
| HLEM | horizontal loop electromagnetic |
| IP | induced polarization |
| k | kilo |
| kg | kilogram |
| km | kilometre |
| L, l | litre |
| m | metre |
| M | mega |
| $M | million dolars |
| $m^3$ | cubic metre |
| MASL | metres above sea level |
| min | minute |
| ODH | overburden drill hole |
| oz | Troy ounce (31.1035 grams) |
| koz | thousand ounces |
| ppm, ppb | part per million, part per billion |
| s | second |
| ton | short ton (0.907185 tonne) |
| tonne, t | metric tonne |
| tpa, t/a | tonne per year |
| tpd, t/d | tonne per day |
| US$ | United States of America Dollar |
| VLEM | vertical loop electromagnetic |
| VLF-EM | very low frequency electromagnetic |

**Table 1-1: List of Abbreviations.**

## 2.0 RELIANCE ON OTHER EXPERTS

The QP relied on the following people for non technical information:

- Alasdair Federico, Executive Vice President of Social Corporate Responsibility for section 4.3 and portions of Section 19.

- Ryan Cox, Environmental Manager, for Section 3.3 and portions of Section 19.

# 3.0 PROPERTY DESCRIPTION AND LOCATION

The following sections are copied (and updated) from the previous technical report (SWRPA, 2009)

## 3.1 Location

The Hislop Mine property is part of KLG's Larder Lake Mining District land holdings (Figure 3-1). The property consists of 26 patented mining claims and is located in Hislop and Guibord Townships (Figure 3-2). All of the mineral claims that are patented have been surveyed. The mining claim cover more than 6 km$^2$. The property is centered at approximately 551000E and 5371000N in NAD83, Zone 17.

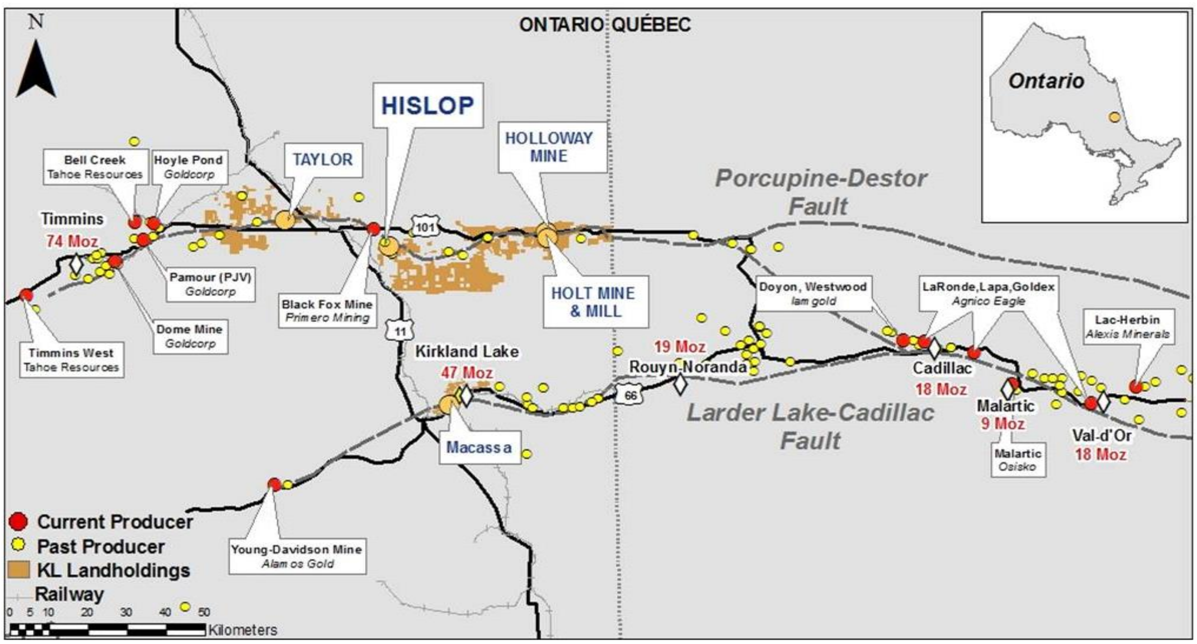


**Figure 3-1: Hislop property location map.**


**Figure 3-2: Hislop property claim map.**

## 3.2 Mineral Tenure and Encumbrances.

The claim group is centered at 5379000N and 529000E in NAD83, zone 17 (using UTM coordinate system).

The 3,269 ha property is comprised of 78 claims that include patented, leased, mineral claims and surface and mineral rights claims (**Error! Reference source not found.**).

The Advance Royalty agreement with Franco-Nevada was bought back for US$1.457 millions around September 25th, 2015.

The QP is not aware of any other royalty covering the Hislop Mine.

## 3.3 Permit Status

All permits and certificates are in good standing with the appropriate regulatory offices. Updates or modifications are performed in compliance with current legislation.

## 3.4 Environmental Liability and Other Potential Risks

In the Qualified Person's (QP) opinion, there are no significant factors or risks that may affect access, title or the right or ability of KLG to perform work on the Hislop property.

# 4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The following sections are copied (and updated) from the previous technical report (SWRPA, 2008).

## 4.1 Climate, Topography and Physiography

The climate in the area is typical continental, with extreme seasonal variations. From May through September, mean temperatures range from 9ºC to 17ºC, with occasional daily highs in excess of 30ºC. In this area, winter conditions can be experienced from October through April. From December through March, mean temperatures range from -7ºC to -16ºC, but there can be short periods of -20ºC to -30ºC. There can be at least 50 cm snow on the ground on average during winter. Annual precipitation amounts to approximately 874 mm, with 66% of this occurring as rain.

All of the property is covered by flat lying to gently rolling terrain with average topographic relief of approximately 6 m around the Hislop East and West Pits. Overburden depths range from 3 m to 40 m, with average overburden depth on the property ranging from 5 m to 10 m. Elevations range from approximately 250 m to 300 m above sea level. The area is reasonably well drained by creeks and small rivers, and there are numerous small swamps and marsh areas. The area is located within the Boreal Shield zone: tree cover is normally thick and predominantly coniferous (with black spruce and jack pine being the most common species), with lesser stands of poplar and birch. The current cover is believed to be a mix of second and third growth forest as a result of logging operations and forest fires.

## 4.2 Means of Access to the Property

The Hislop property is located in the District of Cochrane, 12.7 km east of Matheson on Ontario Provincial Highway 101 and 4.5km south on Tamarack Road (Figure 4-1). To reach the property from Toronto, there are daily scheduled flights to Timmins, which is approximately 80 km by road west of the property. From Montreal, there are daily scheduled flights to Rouyn-Noranda, which is 142 km by road east of the property. Access to various parts of the property package can be achieved by various bush roads and logging roads that join Ontario Provincial Highway 101. In the summer months, these roads are normally passable. The Trans-Canada Highway (Highway 11) goes through the town of Matheson. The Hislop property has been cleared of all infrastructure following the closure of the mine by St. Andrew Goldfields LTD. (SAS) in 2015. The mine area is gated on both access roads into the mine, one on Tamarack Road and the second coming off of Highway 572

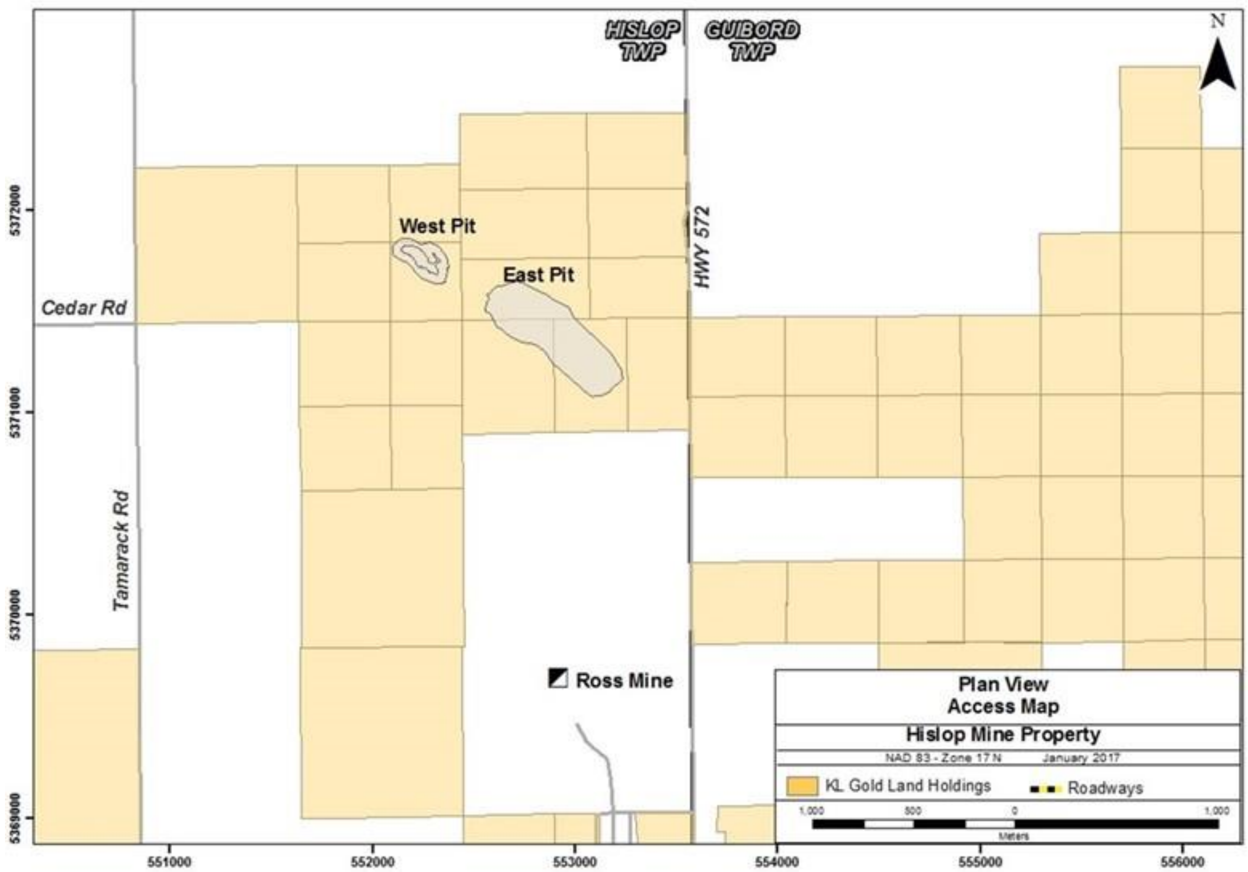


**Figure 4-1: Access to the Hislop property.**

## 4.3 Infrastructure and Local Resources

The infrastructure is well developed and can support mining activities in the area. Power, fuel sources and water are readily available for the Hislop property. Water is plentiful in the area and can be sourced from rivers and small lakes. The existing site power configuration consists of a 27 kV feed, delivered to site via a single wood pole transmission line originating at Tamarack Road. The power is distributed within the site parameters by means of two pole lines, each terminated with pole mounted transformers, metering stations and distribution panels, providing the site with 120V/240V/600V – 200A services. The area is well serviced with an array of major roads and two airports (in Timmins and Rouyn-Noranda).

The Black River-Matheson Township (116,167 ha) has an approximate population of 2,800 residing mainly in the towns of Matheson, Shillington, Holtyre and Ramore. Further to the west are the towns and cities of Porcupine, South Porcupine, Schumacher and Timmins (approximately 45,000 residents). To the north are the towns of Iroquois Falls and Cochrane. To the south is the Town of Kirkland Lake (approximately 10,000 residents).

KLG owns an office building in Matheson that is being used as its Regional Exploration Department base. Additionally, SAS acquired two former motels in Matheson that are operated as temporary housing for relocated employees. KLG uses many local residents as support staff and local contractors to maintain the facilities.

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

The agreement provides a framework for strengthened collaboration in the development and operations of the mine and outlines tangible benefits for the First Nations, including skills training and employment, opportunities for business development and contracting, and a framework for issues resolution, regulatory permitting and KLG future financial contributions.

# 5.0 HISTORY

The information for Section 5 is copied and summarized in the following sub-sections from the previous technical report (RPA, 2009).

## 5.1 Prior Ownership and Historical Exploration

The Hislop property has a long history of exploration and development as well as production in 1990-1991, 1993-1994, 1999-2000, and 2005-2006 as summarized below.

During the period from 1934 through to 1936, McIntyre Mines optioned six claims owned by Torovic Gold Mines and six claims owned by Vindur Porcupine Gold Mines, which form much of the current Hislop Mine property, and carried out a program of extensive surface trenching as well as a surface diamond drill program totalling 3,962.4 m in 45 holes. Results of the program proved inconclusive and the option was dropped in 1936.

In 1935, Mining Corporation drilled three holes totalling 819.3 m along a northeast to southwest section in the S1/2, Lot 2, Con III, on ground west of the Ross Mine. Results of this work revealed gold values over narrow widths in altered volcanic rocks, but no further work was undertaken.

Torovic Gold Mines and Vindur Porcupine Gold Mines amalgamated in 1938 to form Kelrowe Gold Mines, Limited. During the period 1939 through 1940, Kelrowe sunk a shaft to a depth of 98 m, established levels at the 24 m, 55 m and 91 m elevations, undertook lateral development on the 24 m and 55 m levels, and completed 1,498 m of underground diamond drilling from stations on all three levels. All operations were suspended in 1940 and the mine was allowed to flood.

In 1939, Hollinger Mines Limited (Hollinger) drilled 10 surface holes for a total of 2,644 m in the S1/2 Lot 2, Con. III and the N1/2 Lot 2, Con. II that indicated the presence of interesting gold values in a broad zone of altered volcanic rocks. Subsequently in 1940, Hollinger completed a drive to the west-northwest at the 137 m level from the Ross Mine workings that extended 160 m on to the N1/2 Lot 2, Con. II and completed a 33.5 m crosscut towards the south. A total of 1,953 m of underground diamond drilling was completed from the crosscut and stations along the drive.

In 1945, Kelwren Gold Mines, Limited was formed when Kelrowe Gold Mines, Limited and Wren Gold Mines amalgamated. During the period 1945 to 1947, additional claims were obtained and a 32 hole surface diamond drill program totalling 5,028 m was completed. The shaft was deepened to 145 m and a new level established at the 137 m elevation. Development work began on the 91 m level, and more extensively on the 137 m level, where 4,588 m was drilled in 140 holes. In 1948 Kelwren Gold Mines, Limited reorganized to form Kelore Gold Mines, Limited. During 1948, an underground diamond drill program of 122 holes totalling 3,847.5 m was completed. Operations were suspended in January 1949 and the workings allowed to flood. During the period 1949 to 1950, Kelore completed 3,466 m of surface diamond drilling in 14 holes.

During the years 1945 to 1949, Hiskerr Gold Mines Ltd. completed two diamond drill programs on two claims to the northwest of the Kelwren Shaft (23129 and 23130) that now form part of the Hislop Mine property.

In 1953, Kelore Gold Mines, Limited was renamed New Kelore Mines, Limited (New Kelore).

During 1955, Hiskerr Gold Mines Ltd. completed additional diamond drilling amounting to approximately 1,220 m on the Hiskerr claims.

Hollinger optioned the Hislop property from New Kelore in 1973, and during the period 1973 through 1980, completed an extensive surface and underground exploration program. In 1973, 2,322.3 m in 11 surface diamond drill holes (HK series drill holes) were drilled and the mine workings were dewatered. In 1974, Hollinger completed an underground sampling and mapping program, and completed an underground diamond drill program comprising 8,914.8 m in 239 holes (K series holes). Geological reserves were estimated following this work. The option was dropped in 1980. In 1985, Geddes Resources Ltd. (Geddes) optioned the property from New Kelore and Goldpost Resources Inc. (Goldpost) subsequently acquired 100% of the Geddes interest in the property.

In 1986, Goldpost acquired two additional claims which increased the property holdings to a total of 19 patented mining claims and one 160 acre VETERAN Lot. During the period 1986 to 1989, Goldpost completed an extensive surface exploration program consisting of line cutting, ground magnetic surveys, ground very low frequency (VLF) surveys, geological mapping, and trenching, and surface diamond drilling comprising 29,612 m in 303 holes (GK series holes). An underground development program consisting of a 422 m East Decline and a 997 m Main Decline was completed. Connections from the Main Decline to the existing workings were made at the 55 m, 91 m, and 137 m levels and an underground diamond drill program consisting of two drill holes (156.7 m in total) in the East Decline and 42 drill holes (3,614.6 m, HE series holes) in the Main Decline was completed. All levels and declines were channel sampled and geologically mapped.

In 1990, a joint venture was established between Goldpost and SAS to mine parts of the Shaft Zone and the North Zone. During 1990 and 1991, 5,401 m of underground drilling in 288 holes was completed and mining took place.

In 1993, the Hislop property was acquired by SAS from Goldpost. In the period 1993 to 1994, the workings were pumped out, underground drilling totalling 10,373.9 m in 270 holes was completed, development continued and mine production was milled at the Stock Mill. In 1994, production was curtailed and underground workings allowed to flood. Entrances to the declines were sealed with steel barriers in 1995 and equipment was removed from site.

In 1996, the two Hiskerr claims were acquired by SAS. A grid with line spacing at 30 m (100 ft) was established over the entire Hislop Mine property and Realsection induced polarization (IP) surveying totalling 201 line km was completed. During 1996 to 1997, a surface diamond drill program amounting to 8,575.2 m in 14 drill holes (including two wedged holes and deepening of a hole drilled during an earlier drill program) tested several of the IP anomalies

## 5.2 Historical Production

During the 1990-1991 production program, mining methods included longhole (60%), silling (20%), and shrinkage (20%), with ore coming from the Shaft Zone and the North Zone, just north of the old shaft. Haulage of ore out of the mine was by diesel- powered trucks up the ramp. Development for exploration and haulage was in the hanging wall because of poor footwall ground conditions. The ore was stored on surface, then transported by highway truck to the Stock Mill of SAS for processing. Average mill recovery was 92.2%. Mining ceased in August 1991 and the workings were allowed to flood. Cutting high assays to 17.1 g/t Au gave an estimated grade for the reserves mined that was 10% lower than the mill head grade. Cutting to 31.1 g/t Au gave a closer correlation between the reserves mined and the mill head grade.

For the 1993-94 campaign, the workings were pumped out and the 2nd Level and 3rd Level were developed south from the decline through the Marsh Zones and the South Zone. The 5-East Zone was discovered near the West Marsh Zone. Ore was hauled up the ramp and trucked to the Stock Mill for processing. Mining was predominantly by longhole stoping. The main ore sources were the Shaft Zone (42,600 tonnes) and the North Zone (35,400 tonnes). Production also came from the Marsh Zones, 5-East Zone, Decline Zone, and South Zone. As noted elsewhere, metallurgical recovery from the Marsh Zones and the South Zone were lower than expected. This caused the overall Hislop Mine recoveries to decrease from 92% in the first half of 1994 to 83% in the latter half of 1994.

Production during the 1990-1991 and 1993-1994 campaigns is summarized in Table 5-1.

| Year | Tonnes Mined (t) | Grade (g/t) | Cont. Gold | Tonnes Milled (t) | Ounces Produced |
|---|---|---|---|---|---|
| 1990 | 23,516 | 7.89 | 6,584 | 18,756 | 4,199 |
| 1991 | 45,986 | 7.1 | 11,572 | 51,271 | 11,750 |
| 1992 | - | - | - | - | - |
| 1993 | 22,808 | 3.05 | 2,480 | 17,047 | 1,634 |
| 1994 | 103,688 | 4.83 | 18,040 | 114,717 | 17,620 |
| **Total** | **195,998** | **5.55** | **38,676** | **201,791** | **35,203** |

**Table 5-1: Underground Production History 1990-1994.**

There was open pit production from the West Zone in the period July 1999 to October 2000. Total production from this time period (based on mill records) was 185,900 tonnes grading 3.4 g/t Au. An additional 612,000 tonnes of waste were mined for a waste:ore ratio of 3.3:1. The mine was operated at a nominal production rate of 1,800 tpd and a cut-off grade of 2.0 g/t Au was utilized. The ultimate pit is approximately 300 m long northwest-southeast, and 100 m wide. Locally, it extends to approximately 60 m below the surface.

During 2005 and 2006, the northeast side of the pit was extended 135 m by 45 m in area to a depth of 27 m. Production records indicate that from August 2006 to March 31, 2007, a total of 52,268 tonnes grading 2.07 g/t Au (from muck samples) were mined.

SAS commenced mining activities in 2009 and continued through to 2014. All infrastructure was removed and final milling ended in mid-2015.

## 5.3 Historical Mineral Resources

KLG is not treating the historical estimates as current mineral resources or mineral reserves. A qualified person has not done sufficient work to classify the historical estimates as current mineral resources or mineral reserves.

Table 5-2 lists the historical mineral resources for the Hislop Mine. These mineral resources were estimated in 1995 by SAS personnel. At the completion of mining in 1994, Scott Wilson RPA (then RPA) reviewed and restated the mineral resources in accordance with the classification at the time. At that time, mineral resources were also reported in the West Zone. However, because of the open pit production, the West Zone has now been removed from the historical mineral resource statement.

| | | Indicated | | | Inferred | | |
|---|---|---|---|---|---|---|---|
| Area | Zone | Tonnes (kt) | Grade (g/t) | Cont. Gold | Tonnes (kt) | Grade (g/t) | Cont. Gold |
| Shaft | Shaft | 14.5 | 7.3 | 3,400 | 20 | 5.4 | 3,500 |
| Shaft | North | 25.4 | 6.7 | 5,400 | 0 | 0 | 0 |
| **Shaft** | **Total** | **39.9** | **6.9** | **8,900** | **20** | **5.4** | **3,500** |
| South | 5-east | 18.1 | 6.2 | 3,600 | 0 | 0 | 0 |
| South | Marsh | 28.1 | 5.3 | 4,800 | 0 | 0 | 0 |
| South | South | 82.6 | 5.9 | 15,700 | 0 | 0 | 0 |
| **South** | **Total** | **128.8** | **5.8** | **24,200** | 0 | 0 | 0 |
| **Total** | | **168.7** | **6.1** | **33,100** | **20** | **5.4** | **3,500** |

Notes:
1. All assays greater than 31.103 g/t Au (1.0 oz/ton Au) are cut to 31.103 g/t Au (1.0 oz/ton Au).
2. Some of the Indicated Resources in the Shaft and South Areas could be categorized as Measured.
3. Numbers in this table have been rounded

**Table 5-2: Historical Mineral Resources as of December 31, 1994.**

These mineral resource estimates were prepared prior to the introduction of NI 43-101 and are not considered to be compliant with NI 43-101. The estimates are considered to be a historical resource initially reported in “Report on the Stock, Taylor, and Hislop East Properties of St Andrew Goldfields” by RPA and dated April 7, 1995. The estimates are considered to be relevant because they give an indication of the size and grade of the remaining tonnages. The classification used in the 1995 report may not be consistent with NI 43-101.

Mineral resources were also calculated during the mining tenure between 2009 and 2015. The following Table 5-3 outlines the mineral resources completed between 2014 and 2016.

| | Indicated | | | Measured + Indicated | | | Inferred | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) |
| 2016 | 1,150 | 3.59 | 132 | 1,150 | 3.59 | 132 | 797 | 3.76 | 95 |
| 2015 | 983 | 4.01 | 127 | 983 | 4.01 | 127 | 690 | 4.16 | 92 |
| 2014 | 983 | 4.01 | 127 | 983 | 4.01 | 127 | 690 | 4.16 | 92 |

**Table 5-3: Hislop mineral resource estimates 2014-2016.**

# 6.0 GEOLOGICAL SETTINGS AND MINERALIZATION

The following sections are copied (and updated) from the previous technical report (SWRPA, 2009).

## 6.1 Regional Geology

The Hislop Mine Complex lies within the Southern Abitibi Greenstone Belt (SAGB) of the Superior Province in northeastern Ontario (Figure 6-1). In very general terms, the Abitibi Subprovince consists of Late Archean metavolcanic rocks, related synvolcanic intrusions, and clastic metasedimentary rocks intruded by Archean alkaline intrusions and Paleoproterozoic diabase dikes. The traditional Abitibi greenstone belt stratigraphic model envisages lithostratigraphic units deposited in autochthonous successions, with their current complex map pattern distribution developed through the interplay of multiphase folding and faulting (Heather, 1998).

At a regional scale, the distribution of supracrustal units in the SAGB is dominated by east-west striking volcanic and sedimentary assemblages. The structural grain is also dominated by east-west trending Archean deformation zones and folds. The regional deformation zones commonly occur at assemblage boundaries and are spatially closely associated with long linear belts representing the sedimentary assemblages. The dominant regional fault in this area is the Porcupine-Destor Fault Zone (PDF). The current locations of these regional deformation zones are interpreted to be proximal to the locus of early synvolcanic extensional faults. Belt scale folding and faulting was protracted and occurred in a number of distinct intervals associated at least in the early stages with compressive stresses related to the onset of continental collision between the Abitibi and older subprovinces to the north (Ayer et al., 2005). Throughout the history of the Abitibi Subprovince, there was repeated plutonism defined by three broad suites:

- synvolcanic plutons;
- syntectonic intrusions that range in age from 2695 Ma to 2680 Ma and include tonalite, granodiorite, syenite, and granite; and,
- post tectonic granites that range in age from approximately 2665 Ma to 2640 Ma (Ayer et al., 1999).

The southern part of the Abitibi greenstone belt, in the general vicinity of the Hislop Mine Complex, consists of three major volcanic lithotectonic assemblages and two unconformably overlying primarily metasedimentary assemblages (Ayer et al., 2002). From oldest to youngest, these assemblages are the Stoughton-Roquemaure (2723 Ma–2720 Ma), the Kidd-Munro (2719 Ma–2711 Ma), the Blake River (2704 Ma–

2696 Ma), the Porcupine (2690 Ma-2685 Ma), and the Timiskaming (2676 Ma-2670 Ma). The three oldest assemblages are all volcanic with plume, island arc, and rifted island arc affinities, have conformable contacts, and were developed by volcanic construction in variable extension to compression tectonic environments. On a belt scale, these form a broad synclinorium cored by the Blake River assemblage.

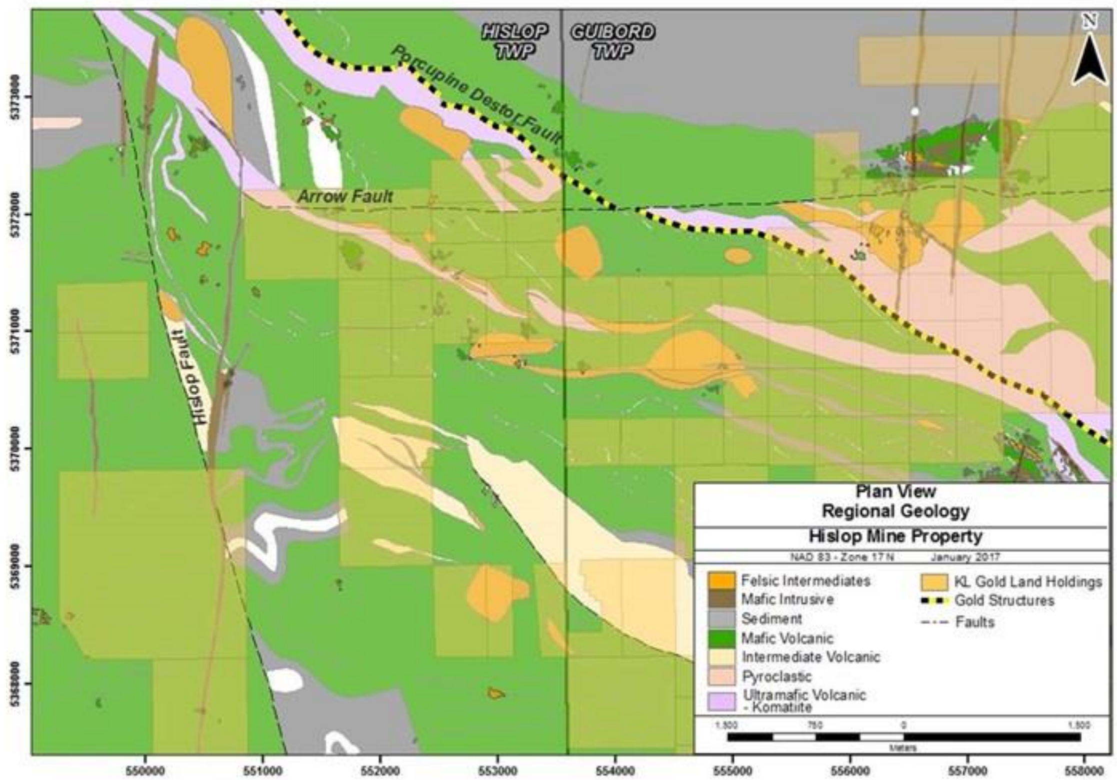


**Figure 6-1: Regional Geology Map around the Porcupine-Destor Fault Zone.**

## 6.2 Local and Property Geology

The Hislop Mine Complex (Figure 6-2**Error! Reference source not found.**is underlain by a sequence of mainly tholeiitic basalts to the North and basaltic to peridotitic komatiite volcanic flows to the South intruded by a number of sheets or dikes of feldspar porphyritic syenite. The syenite related to gold mineralization is a silicified feldspar syenite, which has a NW-SE strike occurring within a major regional fault. Narrow dikes of lamprophyre intrude all other rock types, but mainly in the ultramafic volcanic flows and are generally aligned parallel to the main geological contacts and structures. The rocks have undergone low grade metamorphism and are located in a broad deformation zone, which is part of the PDF. Because of this metamorphism and deformation, many of the geological contacts show evidence of shearing and displacement due to the competency contrast between the major rock types. In addition many of the rocks have undergone varying intensities of hydrothermal alteration, mainly carbonatization and silicification, in part related to the gold mineralization, making the correlation of the rock types difficult across the property.

Two open pits have been mined on the Hislop Mine Complex being identified as the East Pit (Shaft Zone and South Area) and West Pit (West Zone). The East and West Pits have an approximate strike length of 700m and 300m respectively. Although both pits have similar strike directions, there holds the possibility that there is a minor cross-cutting fault between the two pits as there is lateral sinistral movement causing a minor offset. Minor faults (Figure 6-3) are visible in the pit walls with strike directions parallel, subparallel and perpendicular to the strike of the mineralized trend

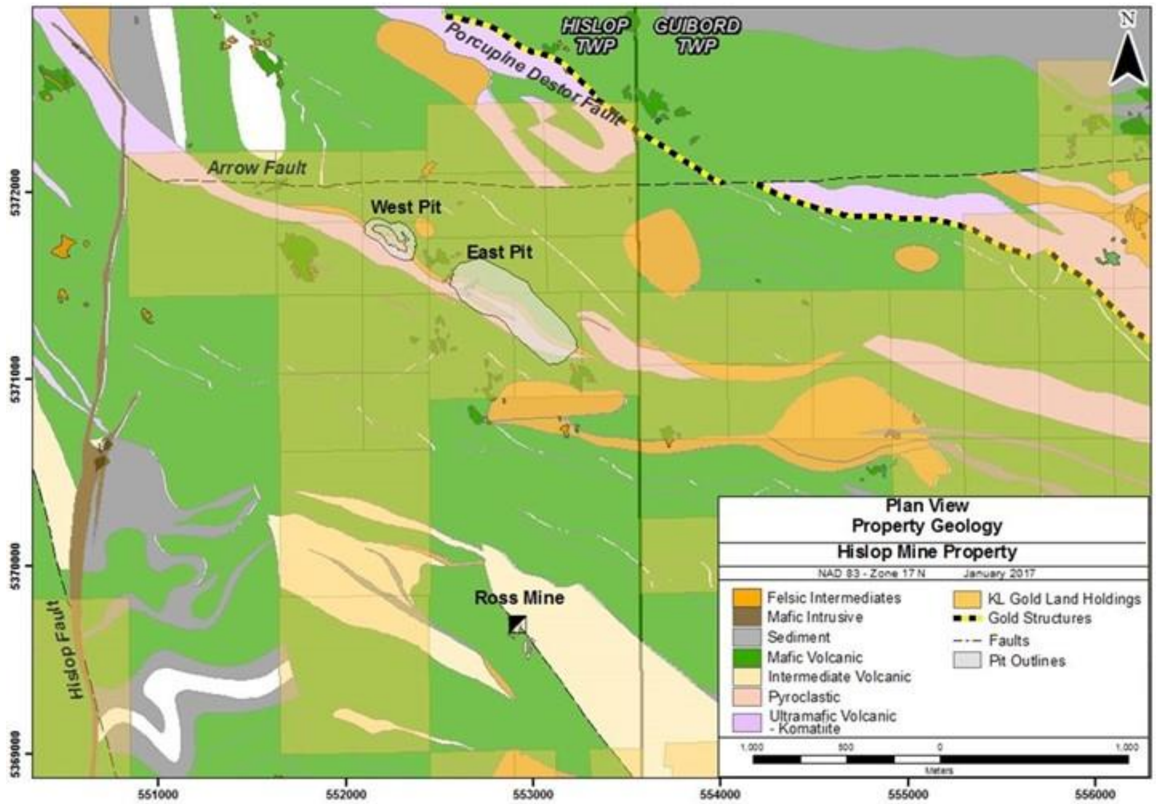


**Figure 6-2: Hislop property geology.**

**Figure 6-3: Photograph taken within the Hislop East Pit showing East-West striking fault.**

Gold mineralization at the Hislop Mine Complex follows a felsic intrusion related model, with the main control being the silicified feldspar syenite. The syenite is generally sub-vertical with varying thicknesses across both pits. The Ultramafic-Syenite contact has been the main focus of targets for gold mineralization in recent drilling due to the higher expected grade. The ultramafic rock often alters to a green carbonate rock with different degrees of fuchsite and/or sericite alteration and finely disseminated pyrite mineralization. At depth, sericite alteration has been more commonly associated with the gold mineralization. The gold however, has been present within both the ultramafic and syenite lithologies, yielding higher grades within the ultramafic rock. Within the mafic volcanic rock, gold mineralization can be associated with minor syenitic dike swarms closer to the main syenite distinct by hematite alteration, but is also present around quartz-carbonate veinlets and fracture systems where pyrite mineralization and hematization or silicification occur.

Deeper drilling beneath the East Pit along strike to the east has resulted in the feldspar syenite being non-existent or pinching out. Therefore, a contact between the mafic and ultramafic rock occur.

Hislop North exploration has discovered a different geological interpretation. Drilling in the area targeted breccia style structures present within mafic rock units. The targets were developed through potential mineralized extensions from Primero Mining's Grey Fox Property trending south onto the Hislop Property. The breccia style structures are also similar to those of the Ross Mine, which was a 1 million oz gold producing mine. These structures are interpreted to be within a brittle deformation zone as one of the types of Archean lode deposits (Figure 6-4).

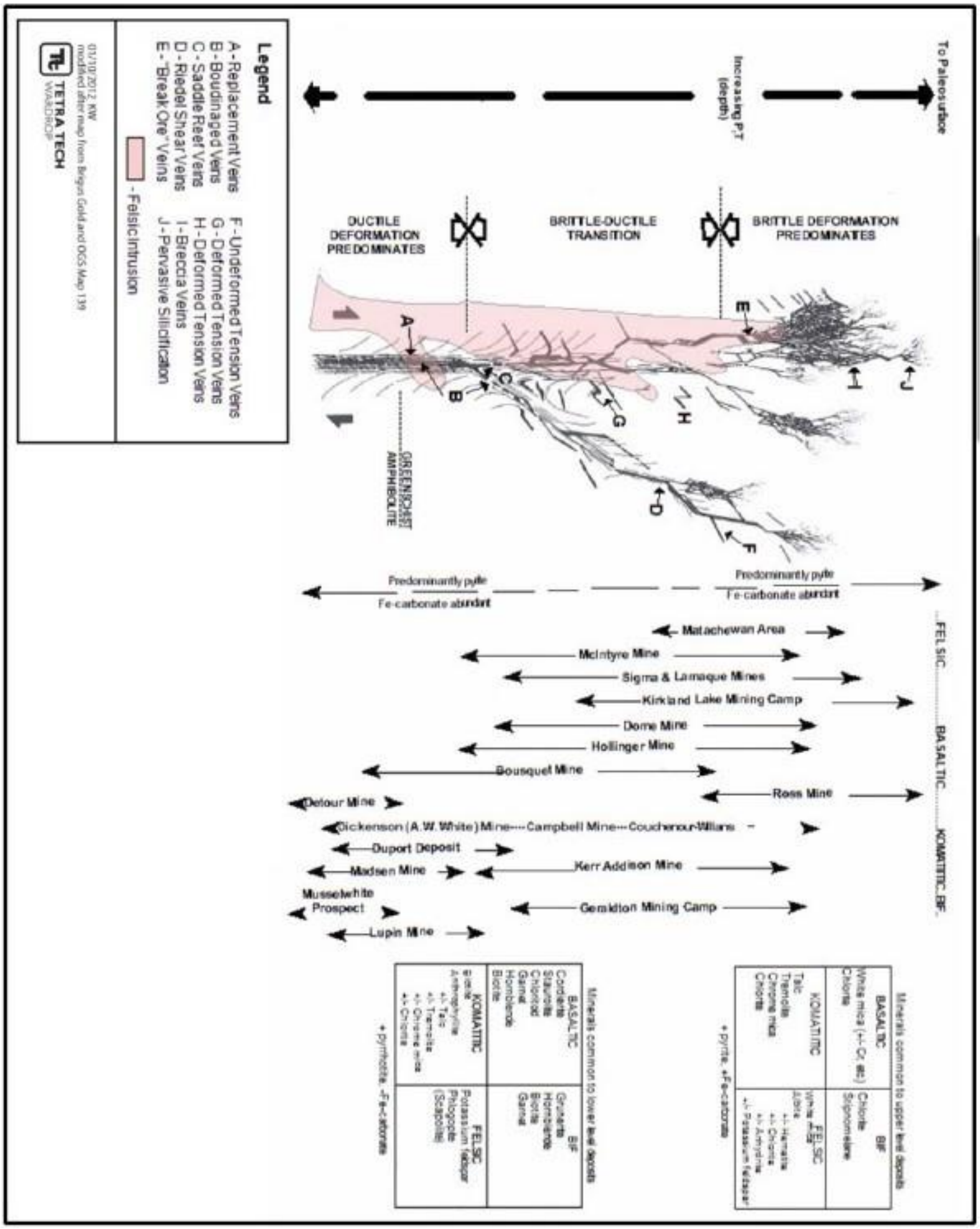


**Figure 6-4: Vertical section of an idealized composite of an Archean lode gold system.**

Lithology in the Hislop North area consists of mainly of alternating mafic rock units, intrusive and volcanic. Mafic pillowed flows, variolitic, spherulitic and amygdaloidal flows have been logged by the geologists historically. These rocks have undergone low grade metamorphism to the lower greenschist facies. Carbonatization (calcite, ankerite, and dolomite) are common throughout most rock units as well as chloritization. Closer towards mineralized veins, silicification (bleaching) or albite alteration becomes dominant with fracture controlled sericitization. Graphite has been present within the fractures around quartz veins known to carry gold.

Sulphide alteration is common within and adjacent to quartz veins, which have been sampled and producing high grade results. Dominantly pyrite is identified as the main replacement. There is no strong correlation with other sulphides being more common with gold hosting veins, although geologists for Primero Mining have identified molybdenite as a common sulphide with gold hosting veins. Pyrrhotite and chalcopyrite have been identified as well, but mainly clustered or coarse grained within pillow selvages and in carbonate veinlets.

Regional fault structures have a strong role in controlling the extension of these gold hosting veins. Three large faults present in the area is the Gibson-Kelore Fault, which strikes northeast to southwest to the west of the property, the Arrow Fault, which is an east-west striking fault approximately 75m south of the northern border and the Ross Fault, a NW-SE striking fault with gold deposits directly adjacent to it. The Arrow fault has been interpreted to be a sinistral fault.

# 7.0 DEPOSIT TYPE

## 7.1 Deposit Type

The Hislop deposit is felsic intrusive related and located in a broad deformation zone within the PDF. Numerous gold deposits occur in the vicinity of the PDF and related structures, such as the Pipestone Fault. These include the major mines of the Timmins camp (Dome, Hollinger, McIntyre, and Pamour). A number of gold deposits have been discovered in more recent years, including the Holt-McDermott Mine, Holloway Mine, Owl Creek Mine, Bell Creek Mine, Hoyle Pond Mine, Aquarius Mine, Maude Lake Deposit, Glimmer (Black Fox) Mine, Stroud Deposit, Fenn-Gib Deposit, Ludgate Deposit, Jonpol Mine, and a number of other prospects.

Some of the PDF gold deposits extend from surface to over 1,000 m below surface, and some are blind deposits, in that they do not reach bedrock surface. The top of the Holloway deposit, for example, is over 300 m below surface.

The following description of potential gold deposit types on the KL Timmins area claims is from Reid (2003). Deposit types and exploration models can generally be characterized as one of three main types, although they tend to merge with each other at times. The deposit types may have more to do with the different host rocks than a genetic difference. Proximity to the main break(s), associated splays, presence of hydrothermal alteration, Timiskaming sediments or high level porphyries are common to all. The three main types are as follows:

- **Green Carbonate Hosted:** Nighthawk Lake, Aquarius, Stock, West Porphyry, and Glimmer all fall into this classification. Gold is generally present as free gold in quartz veins or with disseminated sulphides associated with small intrusive rocks or albitic alteration in completely carbonate altered ultramafic flows. Carbonate alteration is up to 200 m wide and can be traced for thousands of metres discontinuously on strike. The gold is often in crosscutting or conformable features. Timiskaming conglomerates are often proximal or part of the package.

- **Felsic Intrusive Related:** Ronnoco, Pominex, parts of the Taylor Shaft and Hislop are examples of this type. The intrusive rocks vary from feldspar (plus or minus quartz) porphyry in the west to more syenitic in the east. Mineralization is characterized by both thin crosscutting to stockwork quartz veins to disseminated sulphides to more contact skarns or hornfels, depending on host rock. Carbonate alteration is still quite common in the host rocks with silica, sericite, and hematite more within the intrusive.

- **Mafic Volcanic Hosted:** Holloway, Holt, and Hoyle Pond are examples. Ubiquitous carbonate alteration with iron carbonate, albite, silicification and sericite more proximal to ore. Quartz veins and/or albitized variolitic mafic flows are often central to the zone and often found near the mafic/ultramafic contact.

## 7.2 Mineralization

Several mineralized zones occur on the Hislop property along a strike length of approximately 1,200 m following the fault contact between mafic flows to the north and ultramafic rocks to the south. Gold is associated with the margins of feldspar porphyritic syenite dikes that have intruded the mafic and ultramafic rocks. The dikes are generally conformable to the contact between the mafic and ultramafic rocks striking west to northwest and dipping steeply to the north.

It had been observed that gold is distributed at or near major lithologic contacts and the locus of gold mineralization in particular is limited to the north by the Mafic Volcanic – Syenite (+other) altered rocks contact. This contact was modeled in detail, using sections spaced 25m apart oriented at 032° (i.e. looking Azimuth 302°) which was the orientation of the historic local grid and design orientation of most surface drill holes in this area. (Miree, 2013)

The mineralized zones have been called from west to east; the West Zone, Shaft Zone, and the South Area.

Two settings and styles of gold mineralization are present at the Hislop Mine. Gold occurs on the south side of the syenite dike complex in the carbonate and carbonate breccia rock, which separates the syenite dikes from the less altered ultramafic volcanic rocks to the south side. Gold also occurs on the north contact of the syenite dike complex in quartz veinlets, stockworks and fractures in hematite altered and syenitized mafic metavolcanic rocks.

The rocks and the associated mineralization strike northwest-southeast and dip steeply north to vertically. Later cross faults trend both east-west and northeast to southwest, and are steeply to vertically dipping. Gold mineralization occurs along the length of the syenite dike complex, but the gold-bearing zones tend to be wider and higher in grade where associated with these cross faults. The minor off-setting along these faults causes the mineralized zones to have an irregular appearance in detail.

Previous reports have described several zones of gold mineralization occurring in three main mineralized areas along a strike length of 1,100 m, centred on the original shaft. These include the Shaft Area, the South Area, and the West Area. KLG has explored and reinterpreted the near surface area of the Shaft Area.

Diamond drill information was used to create a robust three dimensional picture for each of the lithological units and each of the mineralized zones in the Shaft Area. The mineralized units were named 3000, 3001, 3002, and 3003. The zones were followed over a strike length of 1.4 km. Figure 7-1 is a schematic cross-section showing the geology and extent of mineralized zones 3001 and 3002. Figure 7-1 is a schematic cross-section showing the geology and extent of mineralized zones 3001 and 3002.

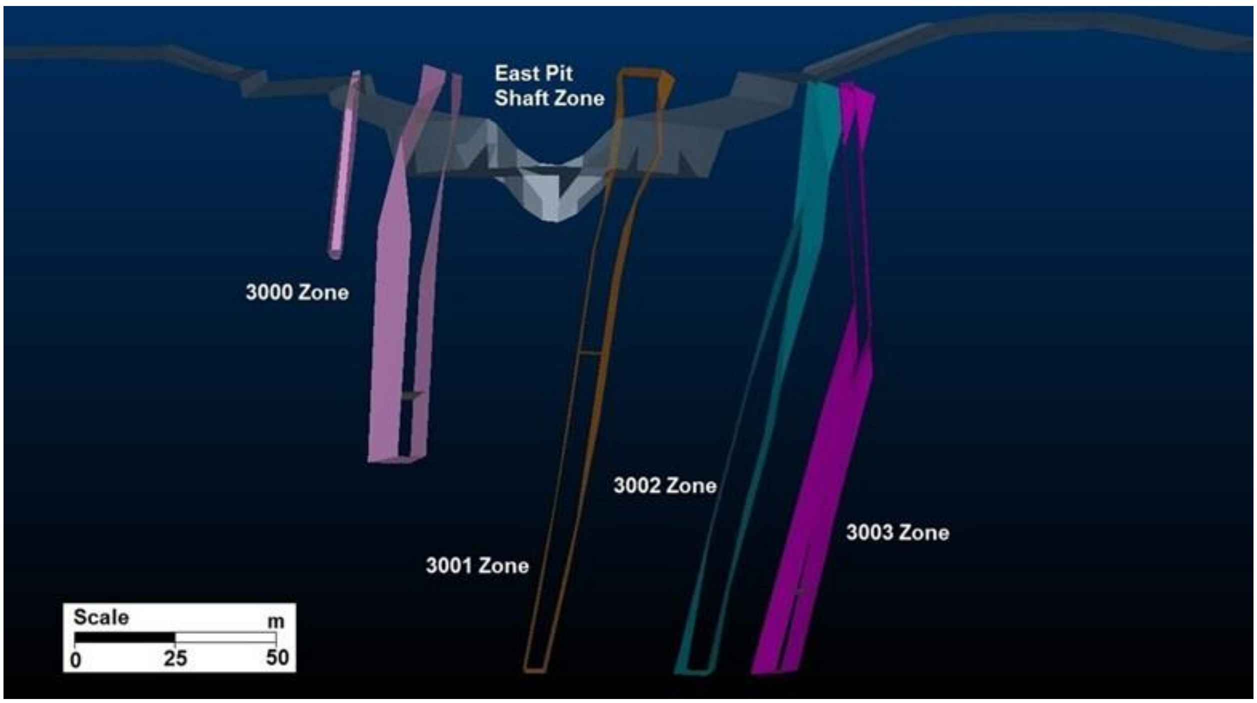


**Figure 7-1: Hislop typical section of ore zones (looking southeast).**

Zone 3001 is hosted within the altered mafic metavolcanic unit. The mineralization is found within lenses of carbonate fracture veinlets/stringers with carbonaceous and hematitic alteration as halos. Pyrite mineralization is very finely disseminated.

Zone 3002 is hosted within the altered (hematized) mafic metavolcanic unit along the north side of the syenite contact. Pyrite mineralization is very finely disseminated within the mafic metavolcanic unit with little carbonate fracturing and stringers. The unit is fairly continuous along its 1.4 km strike length.

Zone 3003 is hosted within the altered ultramafic metavolcanic along the ultramafic and syenite contact. Gold mineralization is associated with the disseminated sulphides (typically pyrite). The altered host rock includes the “Green Quartz Carbonate” unit, which hosts the higher grade material mined underground. The unit is typically defined as moderately to strongly carbonate and fuchsite altered. The degree of alteration varies along the 1.2 km strike length.

### 7.2.1 West Zone

The West Zone sits directly on a major fault that strikes at approximately azimuth 122º (east-southeast) and dips steeply north or vertically. The fault is represented by a thick zone of talc-chlorite schist at least 70 m to 300 m thick. Fabric in the talc schist is closely spaced on a millimetre scale and most of the original fabric dips have been destroyed. The fabric is dominantly oriented with an azimuth of 122° and is nearly vertical. Rare zones in the talc chlorite showing spinifex texture and whole rock high chrome contents (>2,000ppm) which support the assumption that these rocks were komatiitic in composition. The talc schist forms the south wall of the current pit and extends approximately halfway across the pit in the west end, and almost entirely across the pit at the east end.

To the south of the talc-chlorite schist, there is a zone of mafic volcanic rocks. Mafic volcanic rocks to the south of the talc-schist have a weak magnetic signature, with open fold axes apparent from magnetic surveys. Fold axes are roughly parallel to the fault zone. Amplitudes of folds are approximately 800 m. Fabric is poorly developed. These southern mafic rocks are only mapped in core.

To the north of the talc chlorite schist is another group of mafic volcanic rocks. These rocks have a high magnetic signature and tight folding. The amplitudes of folds in this package of mafic rocks are on the order of 200 m. The fold axes in these rocks appear to be oriented at an azimuth of approximately 160º. These mafic rocks show what appear to be variolitic textures in some areas. There are medium-grained gabbroic flows/intrusive rocks in this sequence.

Sandwiched between the northern mafic flows and the talc schist is a coarse-grained feldspar porphyritic intrusive rock. The rock is composed of 40% to 70% pink to grey 5 mm to 20 mm feldspar phenocrysts, sitting in a variably altered, aphanitic groundmass. This rock has been designated syenite, coarse quartz-feldspar porphyry, and even granite by earlier workers. Since the relatively unaltered phenocrysts of this intrusive appear to be potassium feldspar, it is reasonable to call this rock a coarse-grained syenite. The syenite extends the length of the pit, is steeply north dipping, and reaches horizontal widths of 15 m to 50 m. The syenite appears to intrude the northern mafic sequence.

Minor lamprophyre dikes intrude all rock masses and can be seen to cut mineralized material at the north contact zone.

### 7.2.2 Shaft Zone

The mineralization located in the vicinity of the New Kelore Shaft and the Goldpost Decline is called the Shaft Zone. The Shaft Zone is in turn composed of four separate zones: the South and 5-East zones on the south contact of the syenite, and the North and Decline zones on the north contact of the syenite. The near-surface portions of this mineralization have been drilled and re-interpreted by SAS and are the focus of the resource estimates.

The Shaft Zone is located between surface and 150 m depth and varies in width from 2.5 m to 17 m. The average width is 5.5 m. The zone strikes at 120º and dips 85º to the north. Metallurgical recovery from Shaft Zone ore exceeded 90% from production of 102,545 tonnes averaging 6.10 g/t Au. Gold occurs in the edges of carbonate breccias that separates the south contact of the syenite from the ultramafic rocks to the south. The gold either occurs as free gold or with wispy disseminated pyrite.

The 5-East Zone is similar to the Shaft Zone but is located 150 m to 230 m to the east of the shaft. Production from the 5-East Zone was 15,450 tonnes of ore averaging 4.70 g/t Au.

The North and Decline zones are located on the north side of the syenite, and both zones exhibit purple to cream albite-pyrite-hematite alteration in the mafic rocks. The North Zone extends from near surface to at least 130 m below surface, is approximately 80 m in strike length, and reaches widths of up to 10 m. The North zone extends from five metres north of the shaft to 80 m east of the shaft. The North Zone production between 1990 and 1994 was 51,200 tonnes at 5.48 g/t Au.

The Decline Zone is a small zone located approximately 30 m northeast of the shaft from 100 m to 130 m from surface. Production from the North Zone was 9,100 tonnes at 3.50 g/t. Au.

### 7.2.3 South Zone

The South Zone is composed of the Marsh Zones (east, west, and central) and the South Area (not to be confused with the South Zone of the Shaft Area). The Marsh Zones have a strike length of 100 m and extend from surface to 130 m depth. The average width is approximately three metres. The zone is open at depth. The Marsh Zones are 200 m south-southeast of the shaft at the south side of the syenite contact. The Marsh Zones are separated from each other by dextral faults. During the 1993 and 1994 period, production from the Marsh Zones was 21,818 tonnes of ore grading 5.69 g/t Au.

Similarly, the South Zone is 400 m south-southeast of the shaft along the maficultramafic contact and occurs along the south side of the syenite. The average width of the South Area is approximately 4.5 m. In 1993 to 1994, the South Area saw development at the 60 m and 90 m levels from the shaft to the South Area on the two levels. Some 14,000 tonnes of development muck was sent to the mill at an average grade of 4.22 g/t Au. Metallurgical recovery was 80%. The near-surface portions of this mineralization have been drilled and reinterpreted by SAS and are the focus of the resource estimates.

# 8.0 EXPLORATION

There are several exploration targets identified by KLG personnel within the Hislop Property. KLG continued to drill and test prospective areas from 2011 to 2016 identifying two main areas of focus:

- Extensions to the Hislop Pits; along strike and down dip.
- Mineral extensions from adjacent properties.

Drilling adjacent to the Hislop Pits had the goal of extending resources and reserves during production. Additionally, there are two historically drilled 'mini pits' directly south of the West and East Pit. They are currently named the Yo and Ho camps. The geology has similar characteristics to the Hislop Mine Complex.

There were several mineralized trends adjacent to the Hislop Property, which gives interest into drill targeting. To the north is a property owned by Primero Mining Corp. (Primero) where they have identified the 147 Zone, Grey Fox Zone and Contact Zone. Each zone was reported by Primero to have NI 43-101 standard resources.

To the west, two areas of interest were tested. In the northwestern claim block, Romios Gold identified a system of gold bearing veins. This system was named the Alphabet Veins. Lower to the property was the V2 Trend, which is considered to be an extension of the mineralize zone identified by Stroud Resources.

To the south lies the Ross Mine, historically producing over 1.0 M oz of gold over its lifetime. Production at the Ross Mine was open pit and underground development. The underground development extended to the property boundary. Although considered to be an area of high potential, drill testing only commenced in 2016.

The last mineral resource estimate was published in 1994. Between 1999 and 2005, SAS mined 226,600 tonnes grading 3.14 g/t Au from the open pit. Between 1996 and 2009, a total of 235 holes where drilled from surface with a total length of 32,679 m.

The 2006–2007 exploration program of surface diamond drilling and sampling of older core drilled within the hematized mafic volcanics identified the potential of an open pit mine. The 2009 exploration program was designed to increase the information density by infill drilling to reduce the drill spacing in the pit area to 15 m by 15 m to a depth of 100 m. As part of the above programs, approximately 7,000 samples were taken from previously drilled core to provide continuous assay information across the mineralized zones.

Exploration on the Hislop Property continued in 2011 up to 2013 with various targets. The drilling program can be separated into the 2 target areas, Hislop North (holes named preceding with H) and Hislop Pits (Holes named preceding with HP).

The 2013 drilling program had the majority of drilling focusing on extending mineralization beneath the East and West Pits. Drilling was completed during two phases with Phase 2 following up on the results of Phase 1. The mandate was to extend mineralization beneath the pits at a depth of 100 m.

Target spacing for the 2013 pit drilling was intended to be 50 m from hole to hole. Multiple holes may have been drilled from the same set up at varying dips. The dips were between 45-70 degrees. All holes were drilled at an intended azimuth perpendicular to the strike of the trend. North of the syenite, the drilling azimuth was 212 degrees and south of the syenite, the drilling azimuth was 32 degrees. Preference was given to drill from the North of the syenite as potential for intercepting quartz-carbonate fracture systems were higher and there was less duplication of historic data. Due to restrictions with the infrastructure on Hislop and mine activity, it was necessary to drill from the South of the pits.

# 9.0 DRILLING

KLG contracts out all of the diamond drilling on surface and underground. The diamond drilling provides whole core recovery in mainly NQ diameter for the geologist to log and model.

The core is boxed by the contractor at the drill site and transported to a designated pick up area. Employees of KLG would pick up the core on site and transport it to the Exploration Office in Matheson, ON.

Surface drilling occurred on this Hislop property from 2011 to 2016. From 2011 to 2014, KL employed Forage Orbit Garant to complete its exploration program. In 2015 to 2016, Asinii Drilling was the contractor.

# 10.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

## 10.1 Sampling Method

Historically, blast holes samples were taken when mining benches in the Hislop Mine Complex. The blast hole samples were utilized to aid in the reconciliation of grade of gold when processed at the mill. Additionally, a geologist may channel sample benches and walls in the pit to identify the gold distribution. Also, intervals of interest for diamond drilling around the pits and on exploration targets were also sampled. Of the sampling methods, only diamond drilling was considered when creating resource shapes.

A standardized protocol for sampling of surface exploration diamond drill core is employed by KLG. From the 2010 drill campaign, this protocol was documented (KLG, 2010), and geologists and technicians were trained on using the protocol. Revisions were made to the technical procedure over time, but the practices remained the same.

With all drill core, intervals of interest are sampled at a maximum interval of 1.5 m unless a variation in mineralization, lithology or alteration dictates that a smaller interval should be used. A minimum sample interval of 0.3 m is also applied to sampling procedures. If a gap of 7.0 m or less is between sampled intervals of interest, the sampling continues through that gap for continuous results. Visual recognition of variation of auriferous (sulphide) mineralization concentration, strength of alteration mineralization and lithological host are keys used by the geology personnel in determination of an appropriate sample length to be employed. More specifically, samples are begun or ended at the interface of different lithology, alteration assemblages, or concentrations in auriferous mineralization. Sampling extends into barren rock at a minimum of one sample at the beginning and end of any sampled interval. Each sample is assigned a unique sample number, preferable six digits long, as recorded on pre-printed sample tag books. Sample data are entered in the DHLogger program as the samples are being laid out and this information is confirmed by the logging geologist prior to placing the core in the queue for cutting. During sampling, one portion of each tag is placed in each numbered sample bag, while another portion remains in the core box at the end of each sample, and another portion remains in the tag book which contains all records for that sample. Quality Controls in the form of barren samples and standards are inserted into the sample sequence at an industry accepted frequency of 1 barren sample and 1 standard in every group of 20 samples.

The surface exploration drill core samples are tagged by the geologist and transported to the cutting room on site. A technician employed by KLG then cuts the core using a diamond saw blade. The weight of the sample varies from two to ten kg depending of the length of the core sample and its protolith (massive sulphides, chloritic waste rocks).

Chip sampling of wall and benches in the pits also abide by the above described protocol in that sample lengths can range from a minimum of 0.3 m to a maximum of 1.5 m and are delineated by lithological and alteration assemblage, as well as by concentration of auriferous minerals. Chip sample orientations are chosen so that an optimal cross-section of observed material on the face is represented, when logistically possible. Once gold values for obtained samples are received, they are incorporated into drawings and may be used as additional data for evaluations of grade control shapes compiled to maximize gold recovery. Chip samples are analyzed at the Holt Mine assay lab and have a typical turnaround time of 3 days.

Rock is crushed onsite to a size of 50 mm before being hauled to the Holt Mill for processing. KLG practices dictates that one sample from each truck be taken as a representative sample of approximately 50 tonnes. These samples serve to gauge the mill feed and to confirm the chip sample results.

Upper and lower limits for Standards are “3 standard deviations” above and below reported average Au concentration. Major discrepancies from expected values were typically human errors during sampling; however, significant samples associated with failed standards were re-analyzed by batch and Au values confirmed.

Samples containing potentially significant Au values (greater than 0.1 g/t) in batches that contained failed blanks were re-analyzed.

Drill core samples were sent to ALS Minerals in Timmins, ON for 2011, AGAT Laboratories in Mississauga, ON for 2012-2014, Laboratoire Expert Inc. in Rouyn-Noranda, QC for 2015 and Swastika Laboratory in Swastika, ON for 2016.

Blast hole samples were sent to the Holt Assay Lab.

In the QP’s opinion, the sample preparation, security and analytical procedures are adequate.

## 10.2 QC/QA Comparative Assay Laboratory Program

KLG engages in industry standard practices to re-test mineralized rejects at a second commercial lab for a check on the quality of the primary assay results. Approximately 5% of the mineralized exploration samples that go directly to a commercial lab are sent to another commercial lab for verification. As a standard procedure, all exploration samples that assay above 1.0 g/t Au are subjected to multiple re-assaying as a check on the particular intersection.

The program to send the samples out for check analysis is under the direction of D. Schonfeldt employed by KLG.

Two comparative lab-lab checks were completed in 2013. The first one completed in January analyzed the results from the 2012 campaign and the second in August analyzed the results from the 2013 campaign. Both campaigns represent the largest drilling programs completed on Hislop within the last decade.

### 10.2.1 January, 2013 Lab Check – AGAT vs SGS

The January, 2013 lab check compared the original results from AGAT Laboratories with a representative sample batch sent to SGS Mineral Services in Cochrane, Ontario from drilling in 2012. A total of 282 samples were analyzed with the addition of 14 analytical standards and 14 sample blanks. This represented approximately 4% of all samples taken in 2012. A standard 30 g fire assay with an ICP finish was used for analysis from both AGAT and SGS. If the gold value was greater than 10ppm or 100,000ppb, the lab performed an Au-Gravimetric finish reported in g/t.

A number of holes were chosen in a non-bias way to represent the gold values at Hislop. Six holes were selected for the process based on a mixture of low to high gold values. The holes included in the re-analysis were: H12-008, H12-010, H12-012, H12-016, H12-017 and H12-018. The protected rejects for the selected intervals of these holes were used and sent to SGS Mineral Services. Sample sequences containing a standard either had the same standard or one of similar Au value inserted into the sequence. Blanks were kept as the original rejects from previous analysis.

Overall, when the original assays from AGAT Laboratories are compared with the reanalyzed assays from SGS mineral Services there is not a significant difference. Values are relatively close, +/-10%, with the exception of the higher-grade samples having a greater variation.

All standards and blanks fell within the acceptable limits with the exception of two OR-66a and one OR-15d standard sample. These particular samples failed below the lower limit. SGS Mineral Services will be reviewing the data for these failed samples and will possibly run another analysis. Overall, acceptable levels of accuracy from AGAT Laboratories were able to be confirmed by performing this lab check with another lab.

### 10.2.2 August, 2013 Lab Check – AGAT vs Accurassay

The August, 2013 lab check compared the original results from AGAT Laboratories with a representative sample batch sent to Accurassay Laboratories in Rouyn-Noranda, Quebec. A total of 304 samples were analyzed with the addition of 17 analytical standards and 16 blanks for further quality control, which is approximately 4.7% of all samples from drill holes beneath the pits and 3.7% of the total samples taken in 2013 on the Hislop Property. A standard 30 g fire assay, ICP finish was used for analysis from both AGAT and Accurassay. If the gold value was greater than 10g/t, the lab performed an Au-Gravimetric finish reported in g/t.

A number of holes were chosen in a non-bias way to represent the gold values at Hislop. Nine holes from the Hislop Pit drilling were selected for the process based on a mixture of low to high gold values. The holes included in the re-analysis were HP13-002A, HP13-007, HP13-008, HP13-009, HP13-010, HP13-017, HP13-021, HP13-025 and HP13-033. The protected rejects for the selected intervals of these holes were sent to Accurassay for re-analysis. Sample sequences containing a standard had a new standard with the same ID code or one of similar Au value inserted into the sequence. The original rejects of the blanks were used from previous analysis.

Overall, bulk of the results from Accurassay was under 50% of difference from the AGAT Laboratories results. Greater deviation occurred with lower grade samples as lower grades would be more impacted by a minor difference. It also cannot be said that one lab resulted in a consistently higher or lower grade return. Results are summarized in Figure 10-1.

All standards and blanks fell within the acceptable limits. One Oreas-67a standard had insufficient material to be tested, however. Overall, acceptable levels of accuracy from AGAT Laboratories were able to be confirmed by performing this lab check with Accurassay Laboratories.

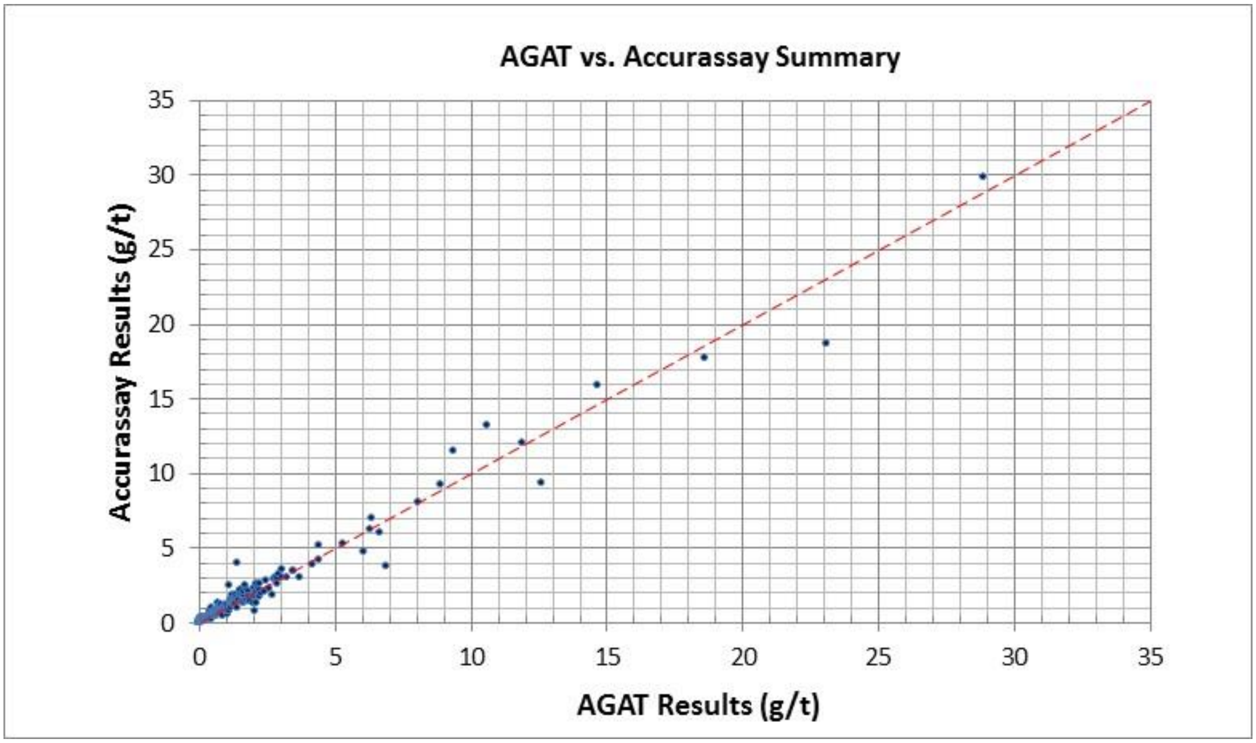


**Figure 10-1: AGAT Lab check vs. Accurassay Lab, August, 2013.**

## 10.3 QC/QA Holt Assay Lab

The Holt Assay Laboratory follows industry standard protocols for sample preparation and assaying. The lab inserts QC/QA standard samples, barren samples and a duplicate with each batch to test that proper procedure is being followed for quality control.

## 10.4 Assay Laboratory Site Audits

Analytical labs used by the Exploration group are routinely inspected and a more detailed lab audit was conducted by Analytical Solutions Ltd in March 2017. Quality control samples consisting of reference standards and blanks are inserted into each batch and pulps are submitted for lab / lab check assay,

# 11.0 DATA VERIFICATION

Data was checked prior to the release of the 2013 Updated Technical Report by Scott Wilson RPA. The data was not subjected to any independent sampling. Scott Wilson RPA checked the assay entry on a number of diamond drill logs against the original assay certificates and found no transcription errors. Since the Hislop property produced gold in the past, no independent samples were taken by Scott Wilson RPA to confirm the presence of gold in the target area.

Moving forward, the new data was compiled and verified by geologists employed by KLG. All collar data was surveyed by hand held GPS. Drill holes around the Hislop Pits were re-measured using a Trimble and control points prior to completing an internal resource estimate in late 2013.

It is in the QP's opinion that the data has been property verified in the past and QC measures were taken during the continued drilling program.

# 12.0 MINERAL PROCESSING AND METALLURGICAL TESTIING

No new metallurgical test work has been undertaken since the last technical report update.

# 13.0 MINERAL RESSOURCE ESTIMATES

The Mineral Resources for the Hislop Mine effective as of December 31, 2016, are summarized in Table 13-1, with individual zones segregated in Table 13-2. All mineral resources are reported exclusive of Mineral Reserves.

| | Indicated | | | Measured + Indicated | | | Inferred | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) |
| 2016 | 1,150 | 3.59 | 132 | 1,150 | 3.59 | 132 | 797 | 3.76 | 95 |

**Notes**
CIM definitions (2014) were followed in the calculation of Mineral Resource
Mineral Resources are reported Exclusive of Mineral Reserves.
Mineral Resource estimates were prepared under the supervision of D. Cater, P. Geo.
Mineral Resources were estimated at a block cut-off grade of 2.6g/t
Mineral Resources are estimated using a long term gold price of US$1,200/oz (CDN$1,500/oz)
A minimum mining width of 3m was applied
A bulk density of 2.84 t/m$^3$ was used
Totals may not add exactly due to rounding

**Table 13-1: Mineral Resources for the Hislop Mine Complex as of 31 December 2016.**

| | Indicated | | | Measured + Indicated | | | Inferred | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) | Tonnes (kt) | Grade (g/t) | Cont. Gold (koz) |
| 3000 | 114 | 4.14 | 15 | 114 | 4.14 | 15 | 95 | 3.38 | 10 |
| 3001 | 184 | 3.2 | 19 | 184 | 3.2 | 19 | 59 | 2.96 | 6 |
| 3002 | 164 | 3.38 | 18 | 164 | 3.38 | 18 | 76 | 2.87 | 7 |
| 3003 | 685 | 3.64 | 80 | 685 | 3.64 | 80 | 567 | 3.96 | 72 |
| **Total** | **1,147** | **3.58** | **132** | **1,147** | **3.58** | **132** | **797** | **3.72** | **95** |

**Notes**
CIM definitions (2014) were followed in the calculation of Mineral Resource
Mineral Resources are reported Exclusive of Mineral Reserves.
Mineral Resource estimates were prepared under the supervision of D. Cater, P. Geo.
Mineral Resources were estimated at a block cut-off grade of 2.6g/t
Mineral Resources are estimated using a long term gold price of US$1,200/oz (CDN$1,500/oz)
A minimum mining width of 3m was applied
A bulk density of 2.84 t/m$^3$ was used
Totals may not add exactly due to rounding

**Table 13-2: Mineral Resources for the Hislop Mine Complex by Zone (as of Dec 31, 2016).**

## 13.1 Database

The current Hislop database, summarized in Table 13-3, is composed of surface and underground diamond drill holes. The drill hole information has been compiled from a variety of sources and has been standardized to:

- UTM NAD 27 Zone 17 metric co-ordinates;
- All assays reported as g/t Au; and,
- Common lithological legend.

Until 2007, the surface and underground drill collar locations where surveyed by theodolite and distomat to the local imperial mine grid systems. Some of the older holes are located by cut grid co-ordinates, which have since been converted to imperial mine grid coordinates. Starting in 2007, the drill co-ordinates were converted to the UTM NAD 27 systems. Many of the older holes where mathematically converted and the available collars where resurveyed using Topcon GR3 GPS Survey Instrument. Recent drill hole locations and completed drill hole collar locations have been done using the Topcon GR3 GPS Survey Instrument.

Drilling since 2006 has had the downhole surveys done by FLEXIT, a downhole survey instrument that measures deviation and records it digitally. Downhole deviation in historic holes here determined by Tropari instruments and/or by acid tests which give a dip measurement only.

Drilling after 2011 has had the downhole surveys done by REFLEX EZshot tests spaced 50 m apart. Geomagnetics may have affected the accuracy of the azimuth result and that was considered for decision of when to ignore potentially incorrect data. The dips from the EZshot tests were interpreted to be correct. This data has been sorted and considered by the geologist on the project as well as a consulting geologist.

The drill logs provide sufficient description and recognition of the lithology, alteration, geological structures, and mineralization to correlate mineralization between holes and sections. Several underground holes in densely drilled areas were not able to be included within the mineralized zones without compromising the mineral shape. In these few cases, the hole was given the mineral interval for compositing. The assay data from these holes were included in the grade interpolation.

The Mineral Resource estimate is based entirely on diamond drilling data. The diamond drill spacing is approximately 15 m by 15 m.

In 2013, the drill hole collars were converted from UTM NAD 27 to UTM NAD 83 at the end of the drilling program. Moving forward into 2014, the drill program commenced collecting data in UTM NAD 83.

Drilling in 2009 to 2014 was completed by Orbit Garant Drilling. In 2015 and 2016, drilling was contracted out to Asinii Drilling.

| Series | # Holes | Metres | Company | Year |
|---|---|---|---|---|
| **Surface** | | | | |
| VIN | 10 | 923 | Hollinger Mines Ltd | 1939 |
| HO | 54 | 9670 | Kelwren / Hiskerr | 1945 – 1947 |
| HK | 12 | 2322 | Hollinger Mines Ltd | 1973 -1980 |
| GK | 304 | 29612 | Goldpost | 1986 – 1993 |
| GV | 13 | 2188 | Goldpost | 1987 |
| H96/7 | 13 | 8412 | St Andrew Goldfields | 1996 - 1997 |
| H99 | 59 | 4514 | St Andrew Goldfields | 1999 |
| HP06/07 | 57 | 7828 | St Andrew Goldfields | 2006 - 2007 |
| HD09 | 84 | 8844 | St Andrew Goldfields | 2009 |
| HG09 | 2 | 200 | St Andrew Goldfields | 2009 |
| HS09 | 4 | 1200 | St Andrew Goldfields | 2009 |
| H11- | 8 | 3846 | St Andrew Goldfields | 2011 |
| H12- | 42 | 20725 | St Andrew Goldfields | 2012 |
| HP12- | 2 | 861 | St Andrew Goldfields | 2012 |
| H13- | 18 | 7999 | St Andrew Goldfields | 2013 |
| HP13- | 53 | 19082.3 | St Andrew Goldfields | 2013 |
| H14- | 24 | 5785.5 | St Andrew Goldfields | 2014 |
| HP14- | 8 | 3099.1 | St Andrew Goldfields | 2014 |
| HS14- | 2 | 450 | St Andrew Goldfields | 2014 |
| H15- | 5 | 2100.7 | St Andrew Goldfields | 2015 |
| HP16- | 12 | 1413 | Kirkland Lake Gold | 2016 |
| HS16- | 1 | 525 | Kirkland Lake Gold | 2016 |
| **Total** | **787** | **141599.6** | | |
| | | | | |
| **Underground** | | | | |
| K | 238 | 8628 | Hollinger | 1974 |
| HE | 44 | 2784 | Goldpost | 1988 - 1989 |
| BBG | 132 | 2000 | Goldpost | 1990 - 1993 |
| BG | 160 | 3381 | Goldpost | 1990 - 1993 |
| HE | 32 | 2024 | St Andrew Goldfields | 1993 - 1994 |
| **Total** | **606** | **18817** | | |
| | | | | |
| **Grand Total** | **1393** | **160416.6** | | |

**Table 13-3: Summary of the Hislop Drill Hole Database.**

## 13.2 Geological Interpretation and 3D Solid Modelling

Datamine Studio 3 software was utilized to complete updated models of geological and mineralized zone models.

Geologic interpretation completed during the 2013 Resource Estimate program used defined sections oriented looking Azimuth 302º and spaced 25 m apart as located from the approximate position of a historical local grid relative to the NAD27 coordinate system. This was done so that drill holes fall along defined sections approximately equal to historic sections and are static (exact section can be readily reproduced). ‘Section definition’ files were created and have been saved on KLG’s Exploration server in the previously noted folder for on-going use of these defined sections.

KLG personnel completed an initial 3D geological model of main rock types and mineralized zones in 2009, which was updated by the work of a third party consultant (Belzile Solutions Inc.) in October 2013, and further updated during the 2013 resource estimation program. Each of these interpretations and the resource estimates made thereon utilizes consistent mineralized ‘Domain’ ideology and nomenclature. Due to various files not being available at the time of the 2013 resource estimation program, the 2013 interpretation of the mineralized Domains was made largely independent of previous efforts, while remaining consistent in nomenclature and broader terms. Consequently, this has provided an excellent verification of the Domain ideology while incorporating tighter economic criteria on the mineralized zones.

The current mineralized zone interpretation could be further improved with additional review, analysis and re-consideration of each detail of the interpretation and particularly by including additional information on structural trends (which became apparent during the course of this update).

### 13.2.1 Distribution of Main Rock Types

It had been observed that gold is distributed at or near major lithologic contacts and the locus of gold mineralization in particular is limited to the north by the Mafic Volcanic – Syenite (+other) altered rocks contact, this contact was modelled in detail, using sections spaced 25m apart oriented at 032º (i.e. looking Azimuth 302º) which was the orientation of the historic local grid and designed orientation of most surface drill holes in this area.

### 13.2.2 Structural Trends

From high-level overview of main rock type distributions, it is apparent that geological structures have a significant control on the distribution of main rock types including in particular the main syenite intrusion and subsidiary dykes, which in turn control gold distribution. Preliminary interpretations of impacting structural trends were prepared and presented in the (Microsoft Powerpoint©-based) document “*Geological Structures and Evidence for their Impact on Ore Zone Geometry*”, dated Sept. 12, 2013. Main points supporting the interpretation that geological structures play a significant role in gold distribution as summarized by this preliminary note as follows:

- Patterns in blast hole gold grade show abrupt truncations followed by trend towards the northeast,

- The open pits change shape or terminate (end of economic mineralization) coincident with northeast trending features.

Significant improvement of lithologic and mineralized zone interpretations could be achieved through the incorporation of observed, mapped, projected, and interpreted structures in the 3D model. Thus, the following are recommended to help better understand the significance of geologic structures with respect to gold distribution at Hislop:

- Mapping of pit wall exposures in the West Pit, and if possible in the East Pit (so long as remains safely accessible) be completed at the earliest possible time.

- Blast hole grade data be fully compiled and map-able patterns be prepared as 3D shapes in Datamine Studio 3.

Cross-cutting features such as diabase dikes, lamprophyre dikes, and faults be fully queried in the drill hole database and results compiled into 3D shapes of those features in Datamine Studio 3. Cross-cutting features such as lamprophyre dikes have been observed to be hosted within earlier geological structures or zones of weakness, and even though their emplacement may be much later than the mineralizing event(s), those intrusions mark earlier trends which may have influenced ore distribution. In the case of diabase dikes, this needs to be done also to ‘extract’ any diabase of significant volume from the mineral resource estimate.

### 13.2.3 Distribution of Gold Mineralization and Mineralized ‘Domains’

As described in previous work and validated by the current effort, gold mineralization in the Hislop pit area is distributed within mineralized ‘Domains’, characterized by their relative position relative to main rock types. The 2001 Domain was not modelled in this interpretation as it is defined as a low grade envelope surrounding the higher grade ‘300_’ series Domains, and this low grade envelope is ineffective in defining mineralized zones.

Preliminary interpretation of mineralized zones found that sections spaced 25m apart did not adequately represent drill holes drilled at much tighter spacing and also resulted in wireframing problems while completing the cross-section based interpretation. Thus, the mineralized zone Domains were interpreted at sections spaced 15m apart, again oriented at 032$^{o}$ Azimuth and approximately at the historic local grid sections. Datamine section definition files were created for both the 25 m spaced sections and for the 15m sections used, as well as for level plans spaced at 10m depth intervals and for longitudinal sections in order to maintain consistency during this interpretation and in future.

Other base parameters used in the mineralized interpretation are as follows:

- Minimum Horizontal width = 2m
- Minimum gold grade, open pit-able resources = 1.3 g/t Au
- Minimum gold grade, potential underground resources = 2.1 g/t Au

In order to maintain reasonably consistent mineralized zone trends, the interpretation included a minority of intercepts which do not meet the above criteria. It was deemed that in all likelihood, structural continuity of the zone is present, although grade continuity may be lacking in those limited areas and otherwise the zone interpretation would be inaccurately disjointed. If mineral resources are deemed by KLG sufficient to justify continued exploration, these areas should be tested with additional drilling

## 13.3 Density Data

A density of 2.84 g/cm$^3$ was utilized for all Domains. This value was determined by KLG from project data including density measurements as more fully described in the August 6, 2009 Scott Wilson RPA technical report.

## 13.4 Assay Composites

All sample lengths were composited to 1.5m length. This compares well with the maximum sample length as well as zone dimensions. Histograms of sample lengths present in each of the Domains were used to validate the composite length selection. The Scott Wilson RPA August 6, 2009 resource estimate utilized 1.5m composites, while the Belzile 2012 estimate used 3 m composite length.

## 13.5 Assay Statistics

The drill hole file was capped and trace gold values inserted where otherwise absent prior to compositing. This is a conservative approach and was recommended in the August 6, 2009 Scott Wilson RPA technical report.

**Absent Gold Values**

Intervals for which there was no gold value present in the drill hole file (interval was not analyzed) were assigned trace gold value of 0.0025 g/t Au. This value corresponds with the 'less than detection' limit of typically completed gold analyses employed during drill programs for the project.

**Grade Capping**

Log-probability plots of gold grade were generated for each of the Domains; analysis of these distributions found that 30gpt Au is an appropriated capping level for all the Domains. This is reasonably consistent with the previous 2009 and 2012 resource estimate for the Hislop pit area. The 2009 estimate used capping of 5gpt Au for Domain 10-1 (equivalent to Belzile's 2001 Domain and not estimated in this program as largely pertains to open pit resources previously mined), 25gpt for Domain 3-01, 15gpt for Domain 3-02, 35gpt for Domain 3-03, and 15gpt for Domain 3-04. The 2012 estimate used 35gpt as the top cut in the 3001 and 3003 Domains, and 15gpt in the 2001, 3002 and 3004 Domains. In other words, the characteristics of gold values in the recently completed drilling did not markedly impact the overall characteristics of that in each Domain found historically.

## 13.6 Semi-Variograms and Search Ellipsoid

Detailed variography was not performed in this update. The August 6, 2009 Scott Wilson RPA technical report provides a detailed description of the variography completed in that program, which found roughly flattened, spherical search volume shape appropriate. Belzile 2012 resource estimate update provided variography analysis for the 3003 Domain and again found a flattened spherical shape suited zone characteristics with the major axis of the first pass search volume at 10m, second pass at 30m and third pass at 40m.

Variography was visually reviewed in this program and a search ellipsoid shaped 40 x 40 x 10 m in dimensions (summarized in Table 13-4) was deemed appropriate for this estimate in order to ensure population of grade in blocks for deeper portions of the mineralized zones and particularly areas tested by recent, relatively wide-spaced drilling which was an expressed objective of this effort. Subsequent comparative iterations may wish to adjust these dimensions to examine the impact of different ellipsoid shapes or estimate well drilled portions of the zones separate from widely spaced drilled portions.

Static search ellipses where rotation angles are defined and carefully optimized prior to grade interpolation were tried in preliminary iterations for each Domain. It was found that static search ellipsoids did not adequately respect the changing orientations of the Domains and therefore Dynamic Anisotropy was selected for use in the grade interpolation. As Dynamic Anisotropy was used, static rotation angles about each of the X, Y, and Z axes are not required to be defined and carefully optimized prior to the grade interpolation.

| Search Volume | Expansion factor | Minimum No. of Samples | Maximum No. of Samples |
|---|---|---|---|
| Search Volume 1 | 1 x | 3 | 10 |
| Search Volume 2 | 2 x | 3 | 16 |
| Search Volume 3 | 3 x | 2 | 16 |

**Table 13-4: Search ellipsoid parameters for the 4 Hislop Mine Complex domains.**

## 13.7 Grade Interpolation

Block dimensions of X=3m, Y=1.5m, and Z= 3m were used. These relatively small block dimensions were used to respect the sometimes relatively narrow zone shape without creating an inordinate number of subcells in the block model, and to respect the degree of selectivity in anticipated mining. Blocks were rotated to fit the data in 2D in the XY plane, subcelling was used in all directions and subcelling was optimized. Also, it is noted in 'well drilled' portions of the Domains, drill spacing is between 7 and 15m and the block dimensions are roughly consistent with being 1/3 to 1 / 4 average drill spacing as is generally recommended. Drill spacing at deeper portions of the zones though are much wider though. The 2009 resource estimate used blocks 3x3x3m while the 2012 estimate used blocks 6x3x6m.

Inverse distance squared ("$ID^2$") and dynamic anisotropy were used to interpolate grade in the block model.

Grades were interpolated using the search parameters in Table 10. Octant searches were tested but the use of a minimum number of octants greater than 1 resulted in significant portions of the block model lacking interpolated grade (as didn't meet this minimum criteria), particularly near the recently completed drill holes. Consequently, a minimum number of octants of 1 was used, but with a maximum of 4 samples, forcing additional drillholes to be used in densely drilled octants. A minimum of two drillholes were required to interpolate grades into the first and second search passes. Single drillholes were allowed to populate the third search pass, but these areas were assigned to, at most, an inferred resource.

## 13.8 Model Checks

The block models were checked visually by displaying the blocks coloured by grade with the input drillholes coloured by the same legend. Each section was examined in detail to compare estimated grade to drillhole grade. A similar exercise was undertaken level by level from surface to the bottom of each domain.

It is recommended, should the mineral resources be considered for more detailed engineering or economic feasibility analysis, that comparative iterations of grade models be performed, for example, using Ordinary Kriging, examining the impact of different capping levels, increasing block size, or reducing search ellipse dimensions.

## 13.9 Resource Estimate and Classification

The models were classified as measured, indicated or inferred based on a few qualifying factors. The resource classification is essentially based on the density of drill hole information and the continuity of gold grades.

In general, cells estimated using the first search pass were used to populate the indicated category, although some leeway was allowed to fill areas estimated using the second search pass for the indicated category. In addition to search passes, cells were also filtered to the resource cut-off grade (2.2g/t) and large areas of low grade were removed from the indicated category. Classification was performed by defining a perimeter around cells that fit the above criteria for indicated resources. Using this method, isolated patches of indicated are avoided and a contiguous indicated volume is created.

Surface and underground excavations were removed by applying a “MINED” criteria to the block model then filtering only unmined cells. The resource estimates created in 2013 were progressively depleted as open pit mining continued. The final resource reported herein uses a high quality surface DEM model to deplete the open pit excavations. Mineral Reserves were depleted in a similar fashion. Stopes and ore development defined as Mineral Reserves were assigned a “RESERVE” criteria and all reserve cells were filtered from the final resource model. No areas were upgraded to the measured category. Production ceased in Q1 of 2015. In 2016 several holes were drilled to test the orientation of the relatively small 3004 domain. This drilling did not encounter sufficient mineralization to justify inclusion of the resource in future resource estimates, so the domain was removed. A few additional holes were drilled just below the West Pit, to test for possible extensions of mineralization in that area. No significant changes were found between the previously estimated grades and mineralization in the newer drillholes so a comprehensive update to the existing resource was not deemed necessary.

In the QP’s opinion, there are no known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that could materially affect the mineral resources estimate.

# 14.0 MINERAL RESERVES ESTIMATE

The Mineral Reserves effective as of December 31, 2016 are summarized in Table 14-1.

| HISLOP MINE<br>ZONE | CATEGORY | TONNES | GRADE | OUNCES |
|---|---|---|---|---|
| THOR ZONE | PROVEN | 0 | 0.00 | 0 |
| THOR ZONE | PROBABLE | 175,545 | 5.80 | 32,744 |
| | | | | |
| **TOTALS** | **PROVEN** | **0** | **0.00** | **0** |
| **TOTALS** | **PROBABLE** | **175,545** | **5.80** | **32,744** |
| | | | | |
| **TOTALS** | **2 P'S** | **175,545** | **5.80** | **32,744** |

**Notes**
CIM definitions (2014) were followed in the calculation of Mineral Reserves
Cut-off grades were calculated for each stopes
Mineral Reserves were estimated using a long term gold price of US$1,200/oz (CDN$1,500/oz)
Mineral Reserves estimates were prepared under the supervision of P. Rocque, P. Eng.
Totals may not add exactly due to rounding

**Table 14-1: Mineral reserves at the Hislop Mine.**

The mine is currently on care and maintenance. The main changes from the December 2014 disclosure of mineral reserves are attributed to the mining operation (i.e. depletion).

In the QP's opinion, there are no known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that could affect materially the mineral reserves estimate once the operation re-start.

## 15.0 MINING METHODS

Hislop was mined by open-pit method, using conventional excavators, loaders and trucks. The ore was sent to the Holt mill for further processing.

The operation was ceased at the Hislop pit at the end of 2015.

The current reserves are based on technical work that was completed internally in 2014 (Salehi, 2014).

The Hislop Project consists of five zones, 3000, 3001, 3002, 3003, and 3004 (Figure 15-1). Only the portions of the mineral resources identified as indicated have been used in the life of mine (LOM) plan for this scoping study. The long strike length of this deposit (>1.5km) is not conducive to a single ramp and portal system to service the entire ore body. The shallow depth of the deposit and lack of sufficient ounces of gold per vertical meter could not support all the lateral development required from a single access. As a result, the ore body was divided into 3 distinct mining zones; THOR, ODIN, and LOKI. These zones were evaluated independently.

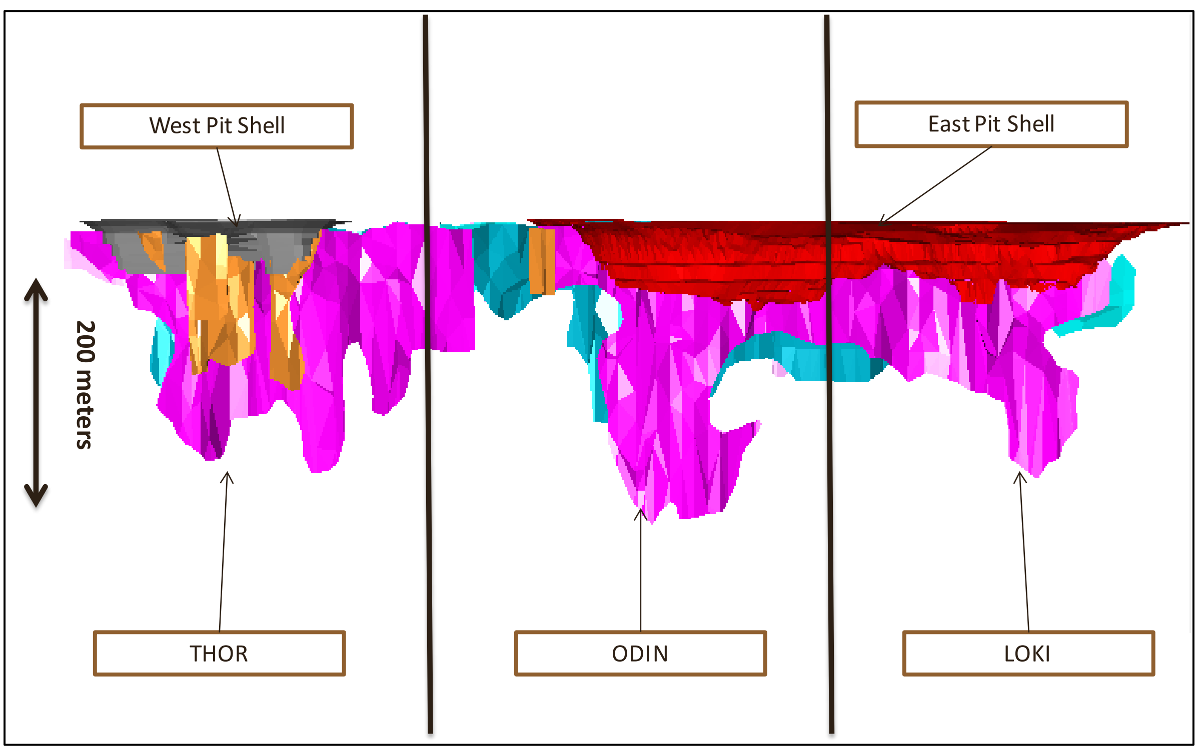

**Figure 15-1: Hislop Indicated Resources (longitudinal view looking north).**

A Sub-Level Cave mining method was selected as the most economical for this project, as it allows for quick access to the ore and does not require backfill. A cut-off grade of 3 g/t was used to develop the life of mine plan for this project. Preliminary mineable shapes were developed from the indicated resources using a cut-off grade of 3 g/t. Figure 15-2 shows the conversion of indicated resources to mineable shapes for all zones

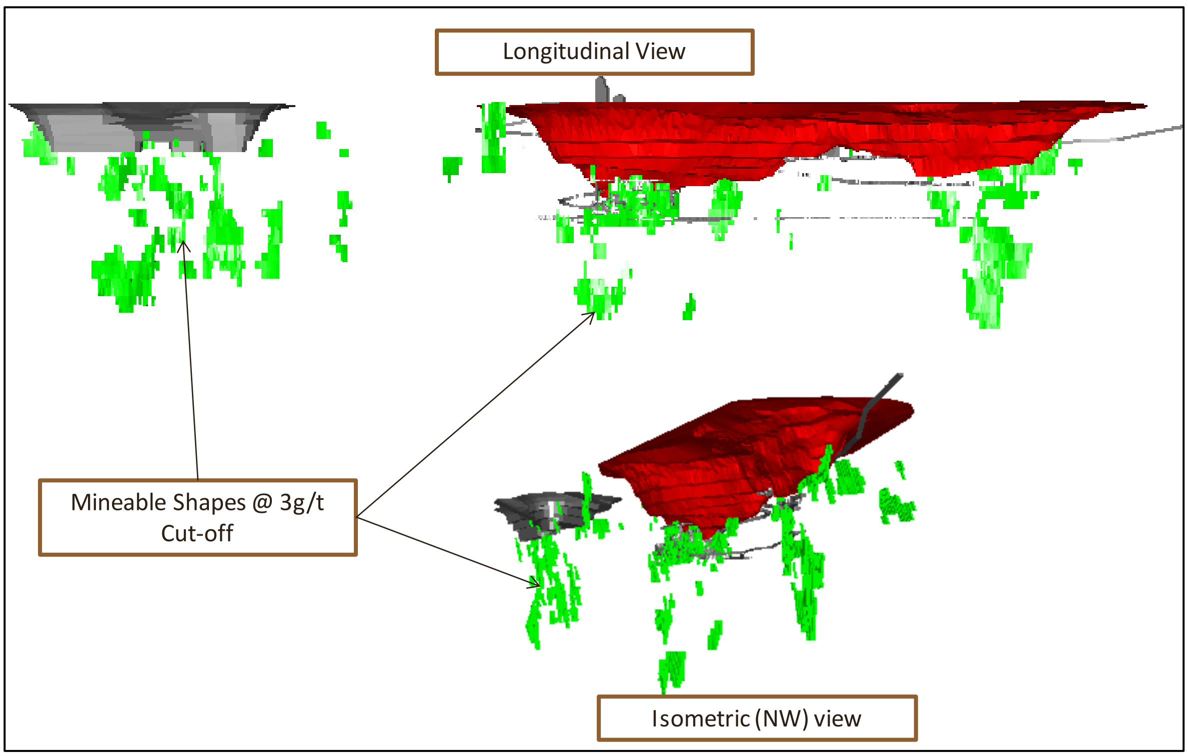


**Figure 15-2: Hislop Mineable Shapes @ 3g/t Cut-Off.**

Figure 15-3 displays the plan view of the access ramp from the bottom of the west pit into the Thor mineralization zone. The ramp is designed at 5m x 5m. Access development and sill development on ore are designed at 4m x 4m. The sill development on ore has been designed to reflect the average width of the ore which ranges from 3 m to 5 m in width.

A fresh air raise, which will also serve as secondary egress into the mine, has been included in the LOM plan. This raise system has been divided into two segments to relieve ventilation pressures on the temporary ventilation system at the portal while acting as secondary egress.

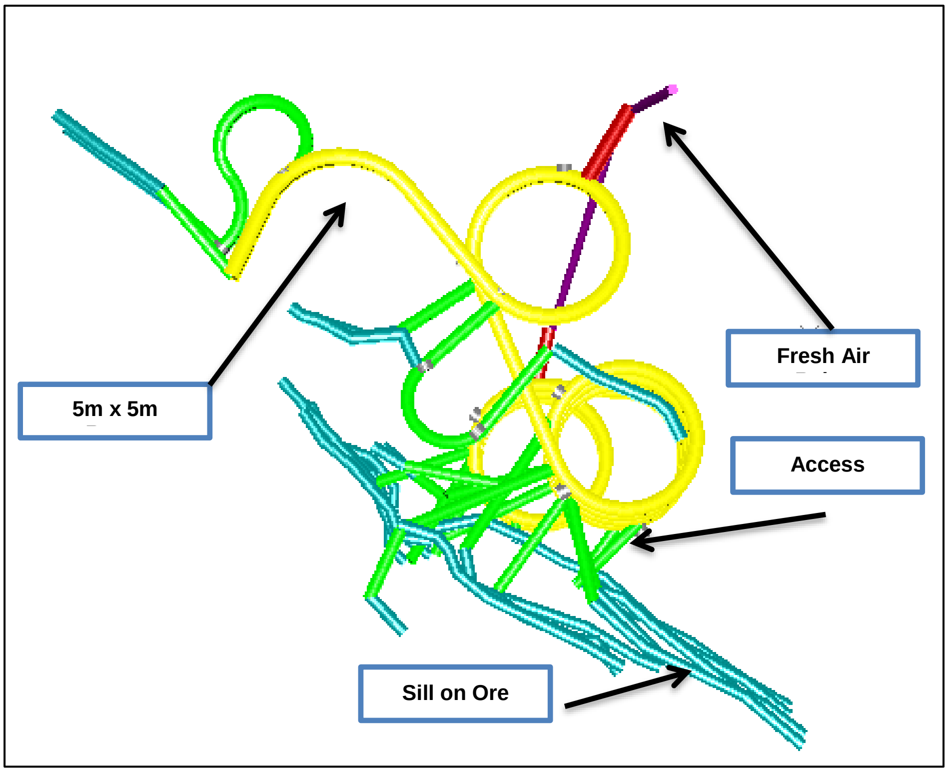


**Figure 15-3: Plan view of THOR Ramp.**

Stopes and reserves shapes included in the LOM plan for the Thor Zone are shown in Figure 15-4.

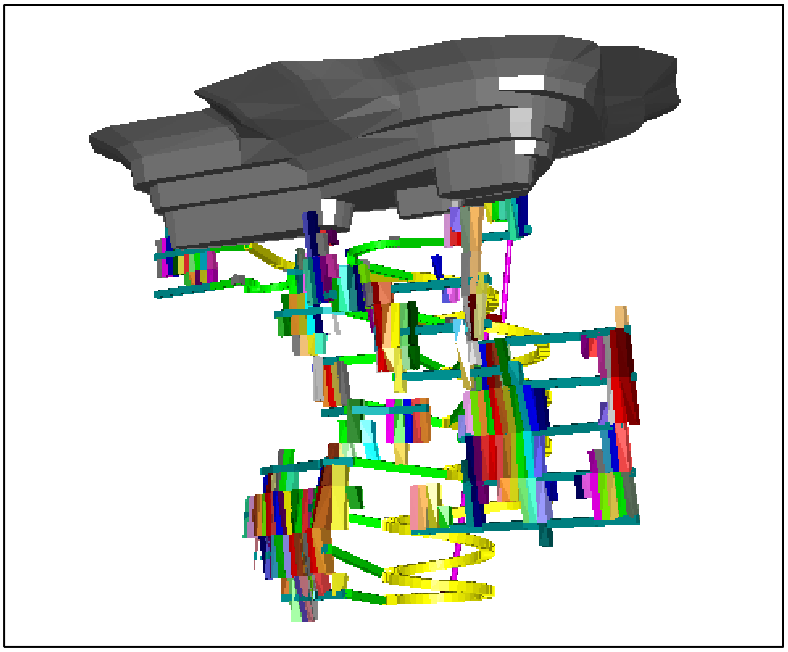

**Figure 15-4: THOR Zone reserves stope shapes.**

## 15.1 Mining Shapes and Associated Tonnage, Grade and Metal Contents

Mine design calculations were performed in using Datamine Studio 3 software. Plan views and cross-sections were plotted and mining shapes were drawn directly on the sections. The shapes were populated with the grade block model, yielding 296 kt grading 5.05 g/t for a total of 48,153 oz in-situ. The value of contained ounces was updated at the end of December to reflect 2016 year-end cost structure and is included in the current mineral reserves statement. The mill recovery rate for the Hislop ore, based on previous performance, is approximately 92%.

## 15.2 Geotechnical

More detailed geotechnical information is required to characterize the response of the Hislop rock mass to mining-induced stresses and validate the stability assessments. The proposed mine design and stope dimensions are based on conservative assumptions on rock mass classification from the region: based on an RMR classification of 70.

## 15.3 Mine Access and Development

Due to its relatively shallow depth, the underground deposit will be accessed via a decline from surface. A summary of all development is presented in Table 15-1.

Capital Development-Decline

A 5 m (wide) by 5 (high) ramp is proposed to access the Thor Zone. Driven at a -15% grade, the planned length is 1,364 meters. This number includes 10% of miscellaneous development for remucks, safety bays, and other mine cut outs.

Capital Development-Lateral

The capital development in this category consists of lateral development to facilitate the excavation and completion of the Fresh Air Raise/Escapeway system.

Capital Development-Escapeway/Ventilation raise (and access)

Two 3.6 m circular raises, approximately 88 m and 150 m long, have been proposed. These raises will act as the secondary egress from the mine while also providing fresh air into the mine for the duration of the project. The first leg of the raise is dipping approximately 80 degrees and the second leg at approximately 70 degrees. The access to the fresh air raise/escapeway and associated development metres are included the total capital lateral development metres.

Operating Development

The operating development consists of all the lateral access development into mineralization and all development on mineralization, named Access and Sill development respectively

| **Capital or Operating** | **Type** | **Description** | **Total** |
|---|---|---|---|
| Capital | Development | RAMP | 1,364 |
| | | Escapeway | 238 |
| | | Escapeway X-Cut | 53 |
| Operating | Production | ACCESS | 871 |
| | | Sill on Ore | 1,251 |
| | | **Grand Total** | **3,777** |

**Table 15-1: Capital and Operating Development Summary.**

## 15.4 Equipment

**The list of proposed major mobile equipment is shown in**

Table 15-2.

| Equipment Type | Engine Rating (hp) | Comments |
|---|---|---|
| LHD - 7 $yd^3$ | 250 | Primary |
| LHD - 7 $yd^3$ | 250 | Primary |
| Scissor Lifts | 82 | Primary |
| EJC 430 Truck (20t) | 325 | Primary |
| EJC 430 Truck (20t) | 325 | Primary |
| 2 Boom Jumbo | 82 | Primary |
| MineCat | 75 | Primary |
| Mancarrier | 50 | Primary |
| Boom Truck | 82 | Primary |

**Table 15-2: List of equipment.**

## 15.5 Dewatering and Fresh Water

Existing hydrological studies at the Hislop project should suffice for this project as the ore body does not fall outside the Hislop Pit footprints. It is anticipated that water inflows will be pumped out of the mine using a conventional dewatering system (i.e. sump pumps) to a settling pond located on surface.

No issues or concerns are anticipated in amending the existing closure plan to take and discharge water. As part of the infrastructure planning and capital cost estimate, it has been assumed that a mine water recycling pond will be constructed on site. A well will also be drilled and installed to ensure supply of potable water for the duration of the project.

## 15.6 Mine Ventilation

Mine air requirements are specified in the provincial legislation. The total airflow was estimated by multiplying the diesel power in break-horse power (hp) by 1.75 cubic metres per second ($m^3/s$). Diesel power for the major mobile equipment is calculated at 57 $m^3/s$ (Table 15-3).

| Equipment Type | Engine Rating (hp) | Air Requirement ($m^3/s$) | Utilization (%) | Air Flow Requirement ($m^3/s$) | 20% Allowance for Leakage |
|---|---|---|---|---|---|
| LHD - 7yd | 250 | 12 | 100% | 12 | 14 |
| LHD - 7yd | 250 | 12 | 50% | 6 | 7 |
| Scissor Lifts | 82 | 4 | 100% | 4 | 5 |
| EJC 430 Truck (20T) | 325 | 15 | 100% | 15 | 18 |
| EJC 430 Truck (20T) | 325 | 15 | 25% | 4 | 5 |
| 2 Boom Jumbo | 82 | 4 | 25% | 1 | 1 |
| MineCat | 75 | 4 | 25% | 1 | 1 |
| Mancarrier | 50 | 2 | 25% | 0.5 | 1 |
| Boom Truck | 82 | 4 | 100% | 4 | 5 |
| **Total** | | 72 | | 48 | 57 |

**Table 15-3: Mine airflow requirement.**

The initial ventilation program for this project will consist of five 250 hp fans to reach the bottom of the ramp via 137cm oval shaped steel or fibre glass conduit. This system will act as the temporary fresh air source for the ramp and mine until an fresh air raise/escapeway can be excavated and commissioned.

The ventilation raise dimensions are based on the air velocity in the raise, assuming that 100% of the airflow has to travel through the raise.

## 15.7 Material Handling

Material will be trucked out of the mine via the decline. A temporary mill feed storage area will be constructed on surface. The ore from the mine will be crushed using a contract rented portable crusher, loaded and hauled to the Holt Mill, as conducted with the Hislop pit ore in the past. Waste will be permanently stockpiled on surface. Upon confirmation that waste rock from Hislop is not potentially acid generating, it is likely that some of the waste will be used as construction aggregate.

# 16.0 RECOVERY METHODS

The mill recovery rate has been assumed at 92% based on historical performance in the mill and, at this point, the QP does not anticipate additional test work to assess the metallurgical performance of this ore type in the mill.

Description of the current milling process is summarized from the previous NI 43-101 technical report.

## 16.1 Process Plant Flow Sheet

The Holt Mill was constructed in 1988 and was originally designed for a throughput of 1,360 tpd. Expansions in 1988 and 2001 increased the throughput to 2,500 tpd and 3,000 tpd, respectively.

Surface ore storage is a total of 4,900 t in three silos, the Holt headframe bin (900 t) and two other separate storage bins (1,000 t and 3,000 t). Ore can be delivered to the mill from the Holt Mine by conveyor or from a separate surface dump that enters a 100 tonne hopper, and then can be fed to either of the two storage bins.

The grinding circuit consists of a 5 m diameter by 6.1 m long Allis Chalmers ball mill, converted to a SAG mill, a 4 m diameter by 5.5 m long Allis Chalmers ball mill and a 3.6 m diameter by 4.9 m long tertiary ball mill, all operating in series and in closed circuit. The details of the grinding circuit are shown below in Table 16-1. The grinding circuit is controlled by an expert system and fuzzy logic.

The primary cyclone cluster consists of six 381 mm (15”) Krebs D15B cyclones. A secondary cyclone cluster consists of twelve 254 mm (10”) Krebs gMAX cyclones with an Outokumpu PSI-200 online analyzer. The secondary cyclone cluster feeds a 27 m (90 ft) Eimco thickener. The thickener underflow feeds six carbon-in-leach (CIL) tanks. The tank system is conventional gravity flow for slurry with counter-current carbon advancement.

Precious metal stripping is performed in batch operations, advancing 2.7 t of loaded carbon through a 1.2 m by 2.4 m (4 ft x 8ft) Simplicity screen. Carbon is transferred to an adsorption column where a Zadra process is utilized as the gold elution method. Barren solution is circulated through two shell and tube heat exchangers and a 360 kW electric inline heater.

The resulting pregnant solution is pumped from the solution tank to an electro-winning cell. The gold precipitate is further refined using a 125 kW Inductotherm furnace and the doré bars are poured in a seven mould cascade arrangement. After stripping, the carbon is regenerated in a rotary kiln, quenched, screened and returned to the process. Carbon fines are collected in a tank, filtered in a Perrin press, and packaged for sale.

The process flow sheet is shown in Figure 16-1.

Reagents and operating supplies for the mill, such as process chemicals and grinding steel, are stored in the reagent storage building attached to the concentrator at the south end of the building.

<u>Laboratory</u>

The assay laboratory is located at the Holt site in an area near but separate from the mill and previously used as an assay lab. The building was renovated and a sample preparation area, fire assay facilities and an AA facility were established to provide analytical services for the site.

| Data | Primary SAG mill | Secondary Ball mill #1 | Tertiary Ball mill #2 |
|---|---|---|---|
| Diameter (m) | 5.0 | 4.0 | 3.6 |
| Length (m) | 6.1 | 5.5 | 4.9 |
| Motor (hp) | 3,400 | 1,650 | 1,250 |
| Ball charge (%) | 8-12 | 45 | 40 |
| Grinding media | 5" balls | 2" balls | 1" slugs |
| Media consumption (kg/t) | 0.75 | 0.30 | 0.45 |
| Speed (rpm) | 13.9 | 16.2 | 17.3 |
| Critical speed (%) | 72.5 | 76.5 | 71.0 |
| Circulating load (%) | 10-15 | 350 | 225 |
| Power draw (kWh) | 2,250 | 1250-1450 | 750-900 |
| Lifters | Polymet | Rubber | Rubber |
| Liners | Polymet | Rubber | Rubber |
| Discharge grates (mm) | 18-30 mm by 40 mm | Overflow mill | |

**Table 16-1: Details of the grinding circuit.**

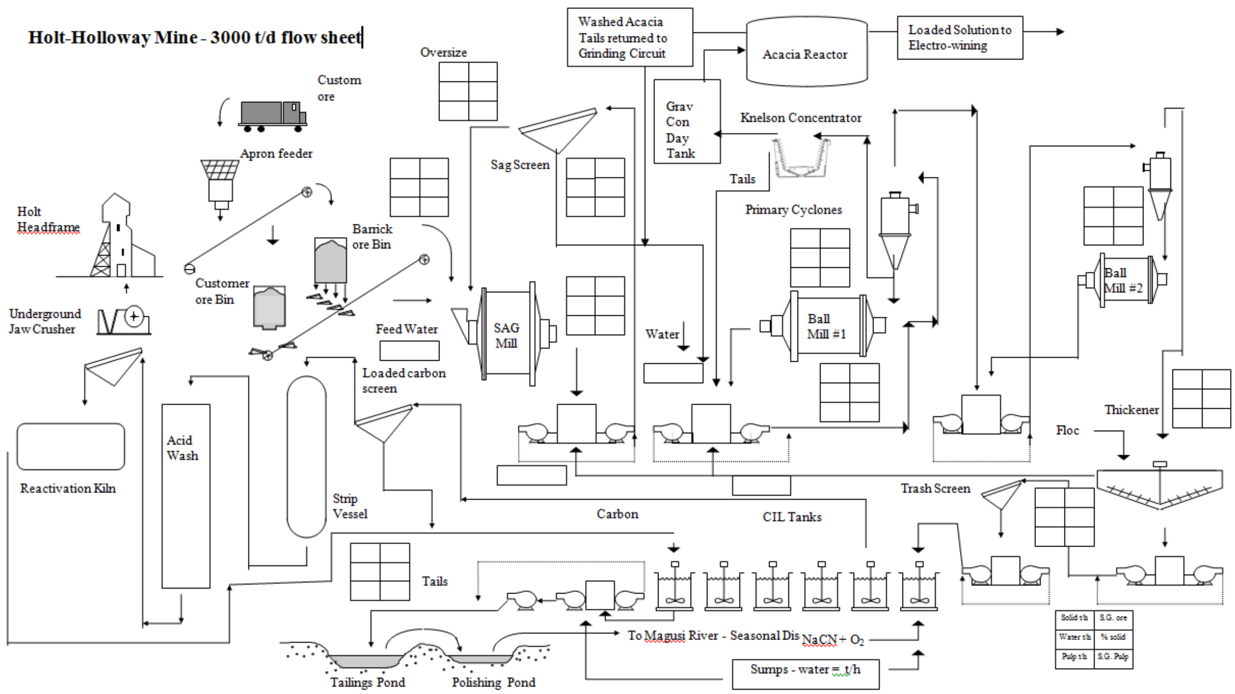


**Figure 16-1: Process flow sheet.**

In the QP's opinion, there are no processing factors or deleterious elements that could have a significant effect on potential economic extraction at Hislop.

# 17.0 PROJECT INFRASTRUCTURE

The surface infrastructure from the previous open-pit operation will need to be re-established prior to start-up of the underground mine.

A budget of $3.0M is estimated to cover the costs associated with all surface projects required to develop and set up the Hislop Underground deposit:

- Surface Facilities
- Portal
- Permitting
- U/G Projects

# 18.0 MARKET STUDIES AND CONTRACTS

## 18.1 Market for the Product

The QP has reviewed KLG contract with the refiner and he is satisfied that the contract reflects industry norms and reasonable market terms for selling Hislop gold production.

## 18.2 Material Contracts

When a decision is made to re-start the operation, KLG will negotiate with one or more contractors for the development, mining and haulage to the Holt Mill.

# 19.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

There have not been additional studies since the operation at the mine ceased in 2015.

Material from the Hislop Mine was processed at the Holt Mill. The Holt Mine Tailings Management Facilities (TMF) are summarized below.

The TMF area contains four individual basins: two tailing ponds, one sludge precipitate pond and one polishing pond. Within the tailings facilities, there are 18 individual dam structures, a total of 465.4 ha of watershed area and 212 ha of tailings area. The remaining storage capacity is approximately 4.56 Mt at the close of 2016. In 2016, KLG submitted an amended permit to the MOE for the implementation of Sub-Aerial stacking in the Southwest Basin of the TMF. The amendment will provide an estimated additional 2.17 Mt of storage capacity. The tailings facilities are inspected annually by an external third party and comply with current provincial and federal regulations. A plan view of the TMF is displayed in Figure 19-1.

KLG has retained Golder Associates (Sudbury) to assess location(s) for additional tailings storage basin within the TMF that will provide sufficient storage capacity for the LOM plan.

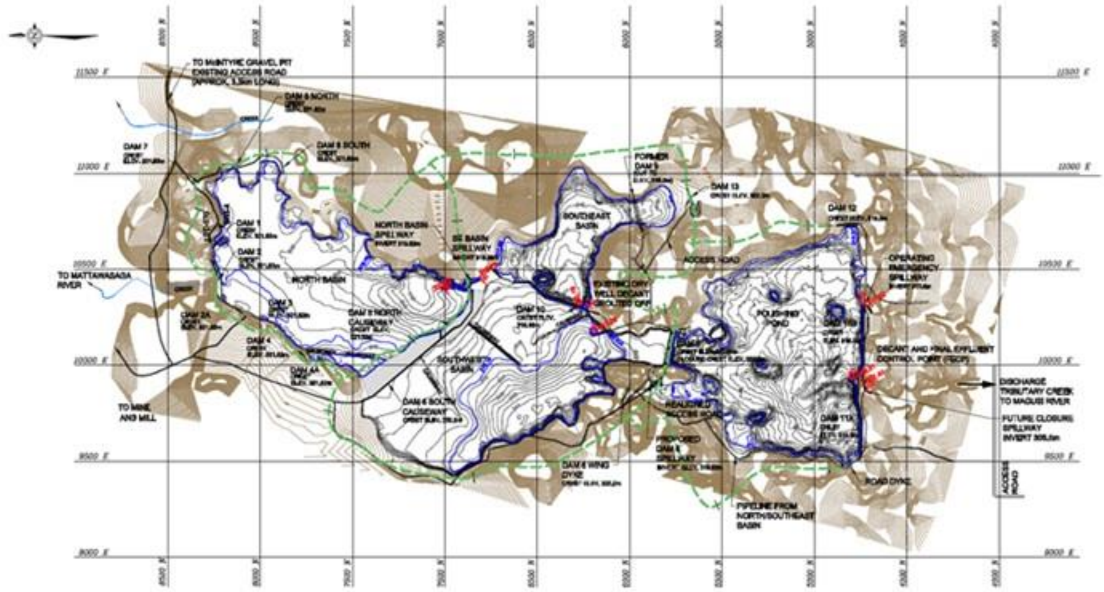


**Figure 19-1: Plan View of the TMF.**

As part of the Closure Plan process  First Nations and community outreach consultation informs the public of developing projects.

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

The agreement provides a framework for strengthened collaboration in the development and operations of the mine and outlines tangible benefits for the First Nations, including skills training and employment, opportunities for business development and contracting, and a framework for issues resolution, regulatory permitting and KLG’s future financial contributions.

# 20.0 CAPITAL AND OPERATING COSTS

The Hislop Mine is not in operation.

When a decision to re-start the operation is made, a budget of $3.0M is estimated to cover the costs associated with all surface projects required to develop and set up the Hislop Underground deposit. These costs are based on historical pricing from recent projects of similar nature in the Timmins mining district.

A yearly maintenance cost of approximately $100,000 is budgeted until the operation re-start.

# 21.0 ECONOMIC ANALYSIS

KLG is a producing issuer and, following instructions contained in Form 43-101F1 Technical Report, may exclude information required under Item 22 (Economic Analysis) for technical reports on properties currently in production unless the technical report includes a material expansion of current production.

# 22.0 ADJACENT PROPERTIES

There are no adjacent properties to the Hislop Mine that are material to the scope of this technical report.

# 23.0 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information on the Hislop Mine known to the QPs that if undisclosed would make this NI 43-101 technical report misleading or more understandable.

# 24.0 INTERPRETATION AND CONCLUSIONS

The Property is being maintained in a state that would require a minimum of time to re-start the operation.

The property is extremely well positioned geologically and is essentially surrounded by mineral deposits and a former mine. The Grey Fox deposit lies 1 km to the northwest, the former Ross Mine is located 1 km to the southeast. In 2016 the company conducted a VTEM Magnetics / Electro-magnetics survey over the property, which defined a number of geophysical anomalies at depth. The company is correlating the geology to the anomalies at this time.

## 25.0 RECOMMENDATIONS

A number of recommendations arising from the Technical Report are:

- On-going exploration data compilation and target work-ups which integrate all geoscientific data sets.

- Diamond drill follow-up is recommended to test for the mineralized extensions of the V2 zone to the east.

- Work programs will be recommended once the results of the recent heliborne VTEM geophysical survey have been compiled and compared against the local geological and structural setting for the property.

In 2017, the Company's exploration efforts will continue to focus on identifying additional mineral resources near existing operations. KLG will also initiate "grass roots" exploration on high priority targets, based on a compilation and assessment of targets currently in KLG's extensive database.

The Hislop underground proposed mine design should be re-assessed validated.

# 26.0 REFERENCES

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# 27.0 SIGNATURE PAGE AND DATE

The undersigned prepared this technical report titled “Hislop Property, Ontario, Canada, Updated NI 43-101 Technical Report”. The effective date of this Technical Report is December 31, 2016 and the disclosure date is March 30, 2017.

Signed,

“signed and sealed”

| | | |
|---|---|---|
| Pierre Rocque, P. Eng. | March 30, 2017 | Kirkland Lake Gold Ltd.<br>200 Bay Street, Suite 3120<br>Toronto, Ontario, M5J 2J1<br>Canada |

“signed and sealed”

| | | |
|---|---|---|
| Doug Cater, P. Geo | March 30, 2017 | Kirkland Lake Gold Ltd.<br>200 Bay Street, Suite 3120<br>Toronto, Ontario, M5J 2J1<br>Canada |

## CERTIFICATE OF QUALIFIED PERSON

I, Pierre Rocque, P. Eng., as an author of this report entitled “Hislop Property, Ontario, Canada, Updated NI 43-101 Technical Report” dated effective December 31, 2016 prepared for Kirkland Lake Gold Ltd. (the “Issuer”) do hereby certify that:

1. I am Vice President of Technical Services, at Kirkland Lake Gold Ltd., located at Royal Bank Plaza South Tower, 200 Bay Street, Suite 3120, Toronto, ON, Canada M5J 2J1.
2. This certificate applies to the technical report entitled “Hislop Property, Ontario, Canada, Updated NI 43-101 Technical Report”, dated effective December 31, 2016 (The “Technical Report”)
3. I graduated with a Bachelor’s degree in Mining Engineering (B. Ing.) in 1986 from École polytechnique de Montréal and a Master’s degree in Mining Engineering (M.Sc.Eng.) in 1992 from Queen’s University at Kingston. I have worked as a mining engineer since graduation from university in 1986. I have been directly involved in mine design of underground gold mines and, since 1997 I have overseen the mining engineering department at three narrow veins underground gold mines, providing relief to the Mine Manager and General Manager on site. Since 2008, I have provided corporate direction for the engineering function at junior gold exploration and producing companies, except from 2014 to 2016 where I was Global Director-Mining for an international EPCM firm. I am a member of Professional Engineers of Ontario and Ordre des ingénieurs du Québec.
4. I am familiar with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (“NI 43-101”) and by reason of education, experience and professional registration I fulfill the requirements of a “qualified person” as defined in NI 43-101.
5. I last visited the Hislop Property, subject of the Technical Report, on March 2017.
6. I am responsible for the preparation of the Summary and Sections 1 to 5, 12, 14 to 27 of the Technical Report.
7. I am not independent of the Issuer as described in section 1.5 of NI 43-101, as I am an employee of the Issuer. Independence is not required under Section 5.3 (3) of NI 43–101.
8. I have prior involvement with the property that is the subject of the Technical Report as I was working for the previous owner of the Property between 2010 and 2014.
9. I have read NI 43–101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.
10. At the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 30th day of March, 2017.

“Signed and Sealed”

Pierre Rocque, P. Eng.
Vice President Technical Services

## CERTIFICATE OF QUALIFIED PERSON

I, Douglas Cater, P. Geo, as an author of this report entitled "Hislop Property, Ontario Canada, Updated NI 43-101" dated effective December 31, 2016 prepared for Kirkland Lake Gold Ltd. (the "Issuer") do hereby certify that:

1. I am Vice President Exploration Canada, at Kirkland Lake Gold Ltd. located at Royal Bank Plaza, South Tower 200 Bay Street, Suite 3120 Toronto, Ontario, M5J 2J1 Canada.
2. This certificate applies to the technical report entitled "Hislop Property Updated NI-43-101", dated effective December 31, 2016 (the "Technical Report").
3. I graduated with a Bachelor of Science degree in Earth Science from University of Waterloo, Waterloo, ON, in 1981. I have worked as a geologist since graduation from university in 1981. During that time, I have been employed as exploration geologist, mine geologist, resource geologist and consulting geologist, at several mining companies. I am a member in full standing of the Association of Professional Geoscientists of Ontario with Registration No. 0161. I have practiced my profession for over thirty years. I have been an Exploration Manager / Chief Geologist at several gold mines and advanced stage exploration projects since 1991 and have been responsible for all geological functions including calculating and reporting Mineral Resources. I have been Vice President Exploration responsible for surface exploration activities on the company's extensive land package since 2012.
4. I am familiar with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and by reason of education, experience and professional registration I fulfill the requirements of a "qualified person" as defined in NI 43-101.
5. I last visited the Hislop Property, subject of the Technical Report, in October, 2016.
6. I am responsible for the Summary and Sections 6 to 11, 13 and 22 to 25 of the Technical Report.
7. I am not independent of the Issuer as described in section 1.5 of NI 43-101, as I am an employee of the Issuer .
8. I have prior involvement with the property that is the subject of the Technical Report. I have been frequently involved with the property having reviewed both the exploration programs and the Mineral Resource estimates at the site since 2012.
9. I have read NI 43-101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.
10. At the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 30 day of March, 2017.

"Signed and Sealed"

Douglas Cater, P. Geo
Vice President Exploration

### Appendix A: Hislop Property Claim list.

| Claim | Township | Claim Type | Size (ha) | Surface/Mining Rights |
|---|---|---|---|---|
| CP 468 | Hislop TWP | Patented Claim | 64.20 | Surface and Mineral Rights |
| L 23129 MRO | Hislop TWP | Patented Claim | 16.80 | Mining Rights |
| L 23129 SRO | Hislop TWP | Patented Claim | 16.80 | Surface Rights |
| L 23130 MRO | Hislop TWP | Patented Claim | 14.00 | Mining Rights |
| L 23130 SRO | Hislop TWP | Patented Claim | 14.00 | Surface Rights |
| L 24685 | Hislop TWP | Patented Claim | 16.70 | Surface and Mineral Rights |
| L 24686 | Hislop TWP | Patented Claim | 14.10 | Surface and Mineral Rights |
| L 24712 | Hislop TWP | Patented Claim | 18.30 | Surface and Mineral Rights |
| L 24713 | Hislop TWP | Patented Claim | 14.90 | Surface and Mineral Rights |
| L 26039 | Hislop TWP | Patented Claim | 20.70 | Surface and Mineral Rights |
| L 26040 | Hislop TWP | Patented Claim | 17.70 | Surface and Mineral Rights |
| L 26540 | Hislop TWP | Patented Claim | 25.10 | Surface and Mineral Rights |
| L 26541 | Hislop TWP | Patented Claim | 15.70 | Surface and Mineral Rights |
| L 26542 | Hislop TWP | Patented Claim | 18.20 | Surface and Mineral Rights |
| L 26819 | Guibord TWP | Patented Claim | 18.80 | Surface and Mineral Rights |
| L 26820 | Guibord TWP | Patented Claim | 18.50 | Surface and Mineral Rights |
| L 26821 | Guibord TWP | Patented Claim | 19.20 | Surface and Mineral Rights |
| L 26822 | Guibord TWP | Patented Claim | 18.80 | Surface and Mineral Rights |
| L 26958 | Hislop TWP | Patented Claim | 22.60 | Surface and Mineral Rights |
| L 26959 | Hislop TWP | Patented Claim | 20.90 | Surface and Mineral Rights |
| L 26960 | Hislop TWP | Patented Claim | 18.60 | Surface and Mineral Rights |
| L 26961 | Hislop TWP | Patented Claim | 14.00 | Surface and Mineral Rights |
| L 26962 | Hislop TWP | Patented Claim | 17.00 | Surface and Mineral Rights |
| L 26963 | Hislop TWP | Patented Claim | 17.60 | Surface and Mineral Rights |
| NP 2632 | Hislop TWP | Patented Claim | 66.50 | Surface and Mineral Rights |
| NP 2633 | Hislop TWP | Patented Claim | 62.60 | Surface and Mineral Rights |