Holt-Holloway Property, Ontario, Canada

Updated NI 43-101 Technical Report

Effective date of the report: 31 December 2016
Issuing date of the report: 30 March 2017

Authors: Pierre Rocque, P. Eng., D. Cater, P. Geo.
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.

Cautionary Note with Respect to Forward-Looking Information

Certain information and statements contained in this Technical Report are "forward looking" in nature. All information and statements in this report, other than statements of historical fact, that address events, results, outcomes or developments that Kirkland Lake Gold Ltd. and/or the Qualified Persons who authored this report expect to occur are "forward-looking statements". Forward looking statements are statements that are not historical facts and are generally, but not always, identified by the use of forward-looking terminology such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "projects", "potential", "believes" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will be taken", "occur" or "be achieved" or the negative connotation of such terms.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any of its future results, performance or achievements expressed or implied by forward-looking statements. These risks, uncertainties and other factors include, but are not limited to, assumptions and parameters underlying the life of mine update not being realized, a decrease in the future gold price, discrepancies between actual and estimated production, changes in costs (including labour, supplies, fuel and equipment), changes to tax rates; environmental compliance and changes in environmental legislation and regulation, exchange rate fluctuations, general economic conditions and other risks involved in the gold exploration and development industry, as well as those risk factors discussed in the technical report. Such forward-looking statements are also based on a number of assumptions which may prove to be incorrect, including, but not limited to, assumptions about the following: the availability of financing for exploration and development activities; operating and capital costs; the Company's ability to attract and retain skilled staff; sensitivity to metal prices and other sensitivities; the supply and demand for, and the level and volatility of the price of, gold; the supply and availability of consumables and services; the exchange rates of the Canadian dollar to the U.S. dollar; energy and fuel costs; the accuracy of reserve and resource estimates and the assumptions on which the reserve and resource estimates are based; market competition; ongoing relations with employees and impacted communities and general business and economic conditions. Accordingly, readers should not place undue reliance on forward-looking statements. The forward-looking statements contained herein are made as of the date hereof, or such other date or dates specified in such statements.

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

CONTENTS

TABLES

FIGURES

APPENDICES

SUMMARY

This National Instrument 43-101 technical report was triggered by the disclosure of the 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 Macassa 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 Macassa 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 Holloway-Holt property is located in northeastern Ontario, adjacent to the Quebec border. The property includes an irregularly shaped, east-west elongate assemblage of claims, patents, and mining leases that more or less straddles Ontario Provincial Highway 101 east for 40 km, beginning 32 km east of Matheson and extending to the Quebec border. The main assets, the adjacent Holt and Holloway mines, are centered approximately 45 km northeast of Kirkland Lake, 96 km northwest of Rouyn-Noranda, and 58 km by road east of Matheson. KLG completed the acquisition of SAS in January 2016.

The land package comprises 48 separate property groups package comprises 48 separate property groups totalling 559 claims distributed as 233 mineral claims, 135 leased claims, and 191 patented claims. The aggregate area is 11,528 ha. There are at least 16 different property agreements with individuals or corporate entities, the most significant one is with Franco-=Nevada Corporation. Titles to the leased and patented claims mostly include both surface and mineral rights. Included in the land package is the Holloway-Holt Mine and Mill complex and tailings facility.

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.

The Holloway and Holt mines lie within the Southern Abitibi Greenstone Belt (SAGB) of the Superior Province in north-eastern Ontario. The 40 km long, mostly contiguous Holt-Holloway property package is a grouping of strategically located claims straddling the Porcupine-Destor Fault Zone (“PDF”) midway along its 260 km length. The defining structural characteristic of the property package and the most important feature from an economic geology viewpoint is the PDF, around which a multitude of gold showings and prospects are clustered. The Holloway and Holt mines are located opposite each other, approximately one kilometre apart, on the north and south sides of the PDF, respectively.

Gold mineralization at the Holt and Holloway mines comprises replacement carbonate-pyrite-albite-quartz alteration that overprints mafic volcanic rocks in, and adjacent to, D3-D4 high strain zones.

The exploration potential on the Holt-Holloway property can be divided into three equally prospective areas:

- Within the immediate mine areas, typically strike and dip extensions;
- Within and immediately adjacent to the gold mineralization previously discovered, namely at Holloway on the Lightning Deep, Blacktop, Canamax and Seagar Hill property segments and at Holt on the Zone 4 west extension, V-93 (vertical extension) and McKenna zones; and,
- In new areas where conceptual exploration targets have been generated based on both past and recent theories that predict the controls on the location of gold mineralization. Holloway mineralized plunge junction, west of Tousignant, and associated with the Howey-Cochenour trend.

Throughout 2016, exploration in the vicinity of the Holloway-Holt mines continues to be a priority, in order to identify and replenish mineral resources. Recent exploration programs were focused at Holt Deep Zone 4 West Extension, at Lightning Deep, and at Canamax / Deep Thunder.

In 2017, exploration programs will search for mineralization further away (over 3 km away) from the Holloway-Holt operations. Approximately 22.2 km of exploration drilling will focus on evaluating the mineralized limits for the West Tousignant/ Harker West and on continuing to evaluate the Howey Cochenour – Coin / Phoenix Fault trend on the Holt property.

Operations at the Holloway Mine were suspended at the end of 2016; an aggressive exploration programme is planned for 2017.

The Holt Mine is accessed by a single shaft, which extends to a depth of 1,195 m from surface. It has three compartments from surface to the 350 m level and four compartments to the 1,195 m level. The shaft has been deepened on several occasions. The shaft is rectangular and has timber sets and guides.

Access to planned mining areas is gained from the four main rail haulage levels: 435, 775, 925 and 1075 levels. The rail haulage drifts were developed 3 m wide by 3 m high, making access between mining zones with large equipment a difficult task. An existing main ramp system is located within the C-104 Zone and extends from 650 level to 1062 level. Sublevel accesses from the main ramp were developed by previous owners at vertical intervals of 20 m. The main ramp has shaft access on four levels: 650, 700, 775 and 925 levels. The 1075 main haulage level is

connected to the main ramp system via a 2 m by 2 m raise from the 1062 level and through an internal ramp in Zone 4. A ramp system was also developed by previous owners in the C-97 zone. The C-97 ramp consists of two ramps: one is a decline from the 925 main haulage and extends to the 970 level, the other is an incline extending from 1075 level to 1010 level. For both ramp systems, there is no connection between the 1075 haulage level and the haulage levels above.

An internal ramp system has been developed in Zone 4 from the 925 haulage level and the 1075 haulage level. The Zone 4 ramp below 1075 level will be mined to accommodate 30 tonne trucks for reserve extraction. The internal ramp system established in Zone 6 connects 775 level to 610 level for the upper portion and is planned to connect the 925 and 775 haulage levels for the lower portion. The system will not include a connection between 1075 level and the haulage levels above.

The Tousignant Zone is planned to be accessed via a portal and decline ramp, which will be located approximately 3 km west of the Holt shaft. A main ramp is planned to be developed in ore through lens 1 to access mining areas and in lens 2, thus minimizing development costs. Mining will retreat from the deeper area (i.e. lens 2) to the shallower area (i.e. lens 1), progressively losing the ramp access to the bottom area

The primary stoping method at the Holt Mine is mechanised long hole drilling and blasting within the mining blocks with rail transport to the shaft ore passes. The spacing between sublevels for long hole stoping varies between 20 m and 17 m, depending on the dip of the ore. Mechanized long hole stoping is planned to be used in all zones at the Holt mine. “Drift and pillar” stoping may be needed in some areas where the ore is too shallow and not amenable to long hole methods. Drilling is performed with top-hammer drills, with hole sizes ranging from 64 mm to 76 mm in diameter. The Tousignant Zone is planned to be mined with modified room and pillar.

The updated mineral resources and mineral reserves (as of December 31, 2016) are presented in Summary Table 1 and Summary Table 2 respectively.

	Measured			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)	Tonnes (kt)	Grade (g/t)	Cont. Gold (koz)
Holt	3,960	4.32	549	3,020	4.10	398	6,970	4.22	947	8,690	4.74	1,320
Holloway	156	4.11	21	1,210	5.39	210	1,370	5.25	231	2,710	5.23	456
Total	**4,110**	**4.31**	**570**	**4,230**	**4.47**	**608**	**8,340**	**4.39**	**1,180**	**11,410**	**4.86**	**1,780**

Notes
CIM definitions (2014) were followed in the calculation of Mineral Resource
Mineral Resources are reported Exclusive of 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 2.5 g/t and 2.9 g/t depending on zone
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/m3 was used
Totals may not add exactly due to rounding

Summary Table 1: Mineral resources at Holt and Holloway mines (as of Dec 31, 2016).

	PROVEN			PROBABLE			PROVEN AND PROBABLE		
	Tonnes (kt)	Grade (g/t)	Ounces (koz)	Tonnes (kt)	Grade (g/t)	Ounces (koz)	Tonnes (kt)	Grade (g/t)	Ounces (koz)
HOLT	1,450	4.2	194	2,500	4.7	376	3,950	4.5	570
HOLLOWAY	0	0.0	0	57	5.7	10	57	5.7	10
Total	**1,450**	**4.20**	**194**	**2,560**	**4.7**	**387**	**4,001**	**4.5**	**581**

Notes
CIM definitions (2014) were followed in the estimation of Mineral Reserves.
Cut-off grades were calculated for each stope
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

Summary Table 2: Mineral reserves at Holt and Holloway mines (as of Dec 31, 2016).

The general consensus from an exploration perspective is that many of the mineral deposits at the Holt- Holloway property remain open or poorly drill tested along strike and dip and therefore they offer excellent potential for both surface and underground exploration programs. One sign of

a robust project or mine is its ability to replenish and grow its mineral resources and mineral reserves. This has been the case at Holt and Holloway since operations were re-started in 2009-2010. Main opportunities at the Holt and Holloway mine are as follows:

- Significant mineralized Extensions to Zone 4, Worvest, Tousignant and Cascade to the west at Holt, and extensions of the Lightning Deep, and Sediment zone to the east at Holloway;

- Significant increase in mineralized extensions of zone 6, Zone 7, C97, C104 mineral zones. These sub-vertical tabular zones are structurally associated with the Ghostmount Fault zone;

- Reduction or re-negotiation of the underlying production royalties;

- Increase in production rate by de-bottlenecking the ore flow system at Holt;

Risks that could be present at the operation are summarized as follows:

- Future exploration programs are unable to keep pace with mining that in turn results in mineral resources and mineral reserves being depleted;

- Mechanical breakdown of critical equipment (hoist, conveyance, mill, etc.) or infrastructure that could decrease or halt the production throughput at the mine;

A number of recommendations arising from the Technical Report are as follows:

- Advancement of the 1075 level to the west is required to facilitate definition drilling of the Zone 4 western extensions. Creation of underground drill platforms to test for the strike extension of V-93 and down-dip extension of Zone 6 mineralization.

- Work to standardize mine grids (local mine grids Holt-Holloway vs. UTM grids);

- Follow-up on SRK's and Rhys' report recommendations. The key recommendation being the exploration for repetitions of mineral deposits at Holloway;

- It is recommended to continue to develop the Holt mine by continually explore and define any potential zone surrounding the operations. It is believed that the land package near the mines is hosting a number of superior exploration targets, namely at Cascade and Tousignant West.

- The technical team on site should continue to optimize the LOM plan and complete technical studies on new and existing zones with a view to maximize profitability and minimize potential shortage of mill feed.

- 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 as identified by a recently completed VTEM heliborne MAG / EM survey, and based on compilations of targets currently in KLG's extensive database. The 2017 exploration program, at a cost of $4.3M, consists primarily of core drilling, on targets situated to the west of the mine. More than 17% of the 2017 budget is planned for drilling on the Holt and Holloway properties.

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).

This update from the 2014 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

The technical report was prepared by employees of KLG and under the supervision of Pierre Rocque, P. Eng. and Douglas Cater, P. Geo., both qualified persons (QP) who are not independent of KLG, as allowed under section 5.3 (3) of the Instrument.

Information was obtained through operation and technical work related to the Holt and Holloway mines over the past few years.

The two QPs frequently visited the Holt and Holloway mines throughout the year.

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.

µ	micron	kVA	kilovolt-amperes
°C	degree Celsius	kW	kilowatt
°F	degree Fahrenheit	kWh	kilowatt-hour
µg	microgram	L	litre
A	ampere	L/s	litres per second
a	annum	m	metre
bbl	barrels	M	mega (million)
Btu	British thermal units	m^2	square metre
CDN$	Canadian dollars	m^3	cubic metre
cal	calorie	min	minute
cfm	cubic feet per minute	MASL	metres above sea level
cm	centimetre	mm	millimetre
cm^2	square centimetre	mph	miles per hour
d	day	MVA	megavolt-amperes
dia.	diameter	MW	megawatt
dmt	dry metric tonne	MWh	megawatt-hour
dwt	dead-weight ton	m^3/h	cubic metres per hour
ft	foot	opt, oz/st	Troy ounce per short ton
ft/s	foot per second	oz	Troy ounce (31.1035g)
ft^2	square foot	oz/dmt	Troy ounce per dry metric tonne
ft^3	cubic foot	ppm	part per million
g	gram	psia	pound per square inch absolute
G	giga (billion)	psig	pound per square inch gauge
Gal	Imperial gallon	RL	relative elevation
g/L	gram per litre	s	second
g/t	gram per tonne	st	short ton
gpm	Imperial gallons per minute	stpa	short ton per year
h	hour	stpd	short ton per day
ha	hectare	t	metric tonne
hp	horsepower	tpa	metric tonne per year
in	inch	tpd	metric tonne per day
in^2	square inch	US$	United States dollar
J	joule	USg	United States gallon
k	kilo (thousand)	USgpm	US gallon per minute
kcal	kilocalorie	V	volt
kg	kilogram	W	watt
km	kilometre	wmt	wet metric tonne
km/h	kilometre per hour	yd^3	cubic yard
km^2	square kilometre	yr	year
kPa	kilopascal		

Table 1-1: List of abbreviations.

2.0 RELIANCE ON OTHER EXPERTS

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

- Ryan Cox, Environmental Coordinator (section 3.3 and portions of section 19).
- Alasdair Federico, Executive Vice President (section 4.3 and portions of section 19; community and First Nations).

3.0 PROPERTY DESCRIPTION AND LOCATION

The following sections are copied (and updated) from the previous technical report (Cater and Salehi, 2015). A summary is presented in the following sub-sections. No material changes occurred since the last technical report was filed in 2015.

3.1 Location

The Holloway-Holt property is located in northeastern Ontario, adjacent to the Quebec border (Figure 3-1). The property package involved stretches through NTS areas 42D9 and 42D12 and includes an irregularly shaped, east-west elongate assemblage of claims, patents, and mining leases that more or less straddles Ontario Provincial Highway 101 east for 40 km, beginning 32 km east of Matheson and extending to the Quebec border. The main assets, the adjacent Holt and Holloway mines, are centered approximately 45 km northeast of Kirkland Lake, 96 km northwest of Rouyn-Noranda, and 58 km by road east of Matheson. The UTM NAD83 coordinates for the Holloway headframe are 592,505 E and 5,374,929 N.

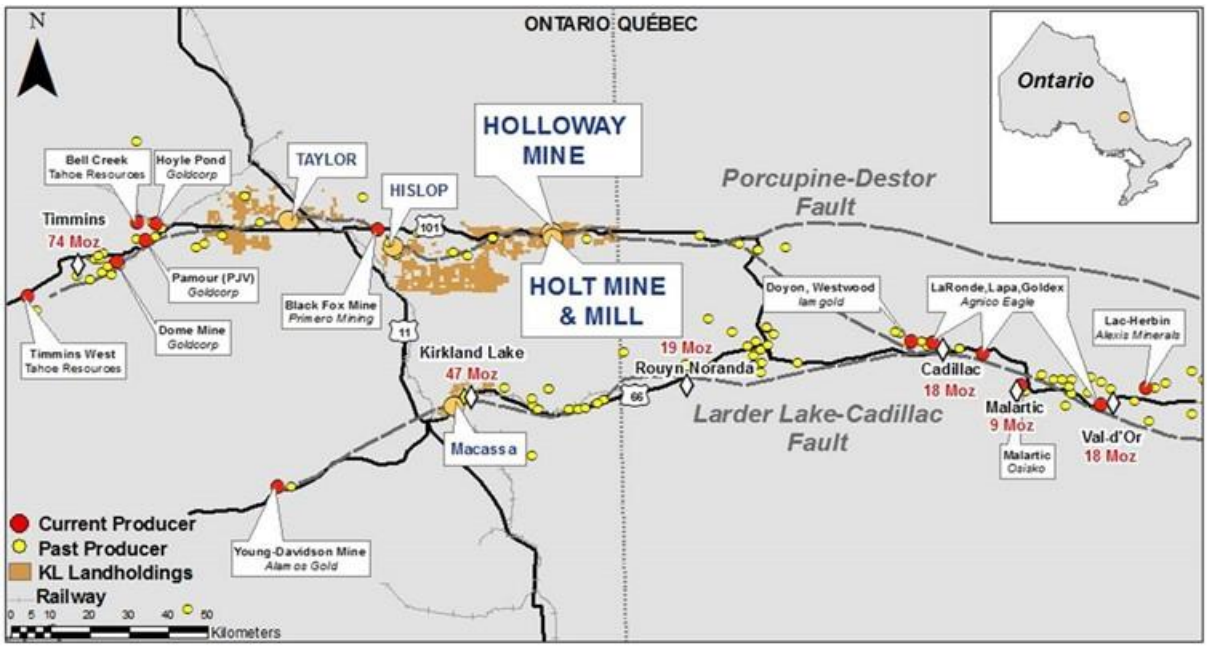

Figure 3-1: Location map.

3.2 Mineral Tenure and Encumbrances

On November 1, 2006, St Andrew Goldfields Ltd. (SAS) purchased 100% of the shares of Holloway Mining Company, a wholly owned subsidiary of Newmont Canada Limited. Holloway Mining Company's assets consisted of the property, facilities and equipment of the Holloway Mine and the Holt Mine and Mill, including 48 separate property groups extending from eastern Marriott Township west into eastern Michaud and McCool townships in northeastern Ontario.

The land package comprises 48 separate property groups package comprises 48 separate property groups totalling 559 claims distributed as 233 mineral claims, 135 leased claims, and 191 patented claims. The aggregate area is 11,528 ha. There are at least 16 different property agreements with individuals or corporate entities. Titles to the leased and patented claims mostly include both surface and mineral rights. Included in the land package is the Holloway-Holt Mine and Mill complex and tailings facility.

Property groups and individual claims location are shown in Figure 3-2 and Figure 3-3. Details of the land tenure are listed in Appendix A. The claim list is a tabulation of the relevant claim information including claim group, township, claim number, parcel number, surface right (SR) or Mineral Right (MR) Owner, percentage owned, area (hectares), pin number and relevant royalty schedule.

The single most significant royalty is a sliding scale royalty on all production from the Holt and Holloway mines payable to Franco-Nevada (that was assigned by Newmont, the former owner, effective 2008). The royalty rates vary along a gold price sliding scale, as shown in Table 3-1.

An addendum to the royalty contract with Franco-Nevada Corporation, dated 10 November 2015, covers the development and production from Zone 7 (formerly referred to as "Ghost Zone"). The amended and re-stated agreement for Zone 7 states:

- The NSR will be 3% if the price of gold is less than US$1,400/oz;
- The NSR will be 10% if the price of gold equals or exceeds US$1,400/oz.

In the event where the operator (now KLG) fails to deliver (and process) 60,000 t from Zone 7 in a consecutive period of six months before December 31, 2018, then the original sliding scale royalty agreement will also cover the production from Zone 7.

Price of gold	Holt	Holloway
Less than US$500/oz	2%	2%
Less than US$600/oz	3%	2%
Less than US$700/oz	4%	2%
Less than US$800/oz	5%	2%
Less than US$900/oz	6%	3%
Less than US$1,000/oz	7%	4%
Less than US$1,100/oz	8%	5%
Less than US$1,200/oz	9%	6%
Less than US$1,300/oz	10%	7%
Less than US$1,400/oz	10%	8%
Less than US$1,500/oz	10%	9%
Less than US$1,600/oz	10%	10%
Less than US$1,700/oz	10%	11%
Less than US$1,800/oz	10%	12%
Less than US$1,900/oz	10%	13%
Less than US$2,000/oz	10%	14%
Less than US$2,100/oz	10%	15%
Over US$2,200/oz	10%	15%

Table 3-1: Royalties sliding-scale by property (includes most significant royalties only).

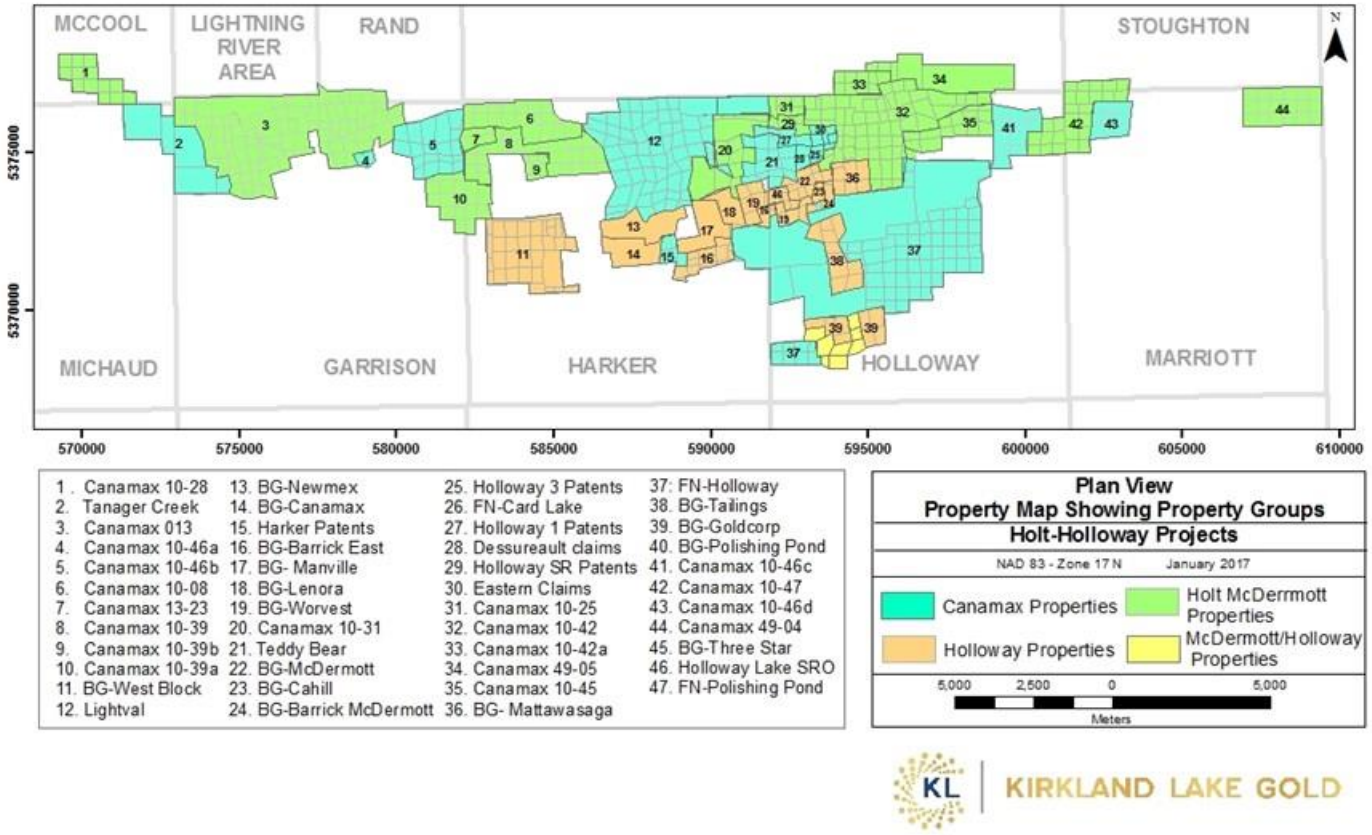

Figure 3-2: Group of properties map.

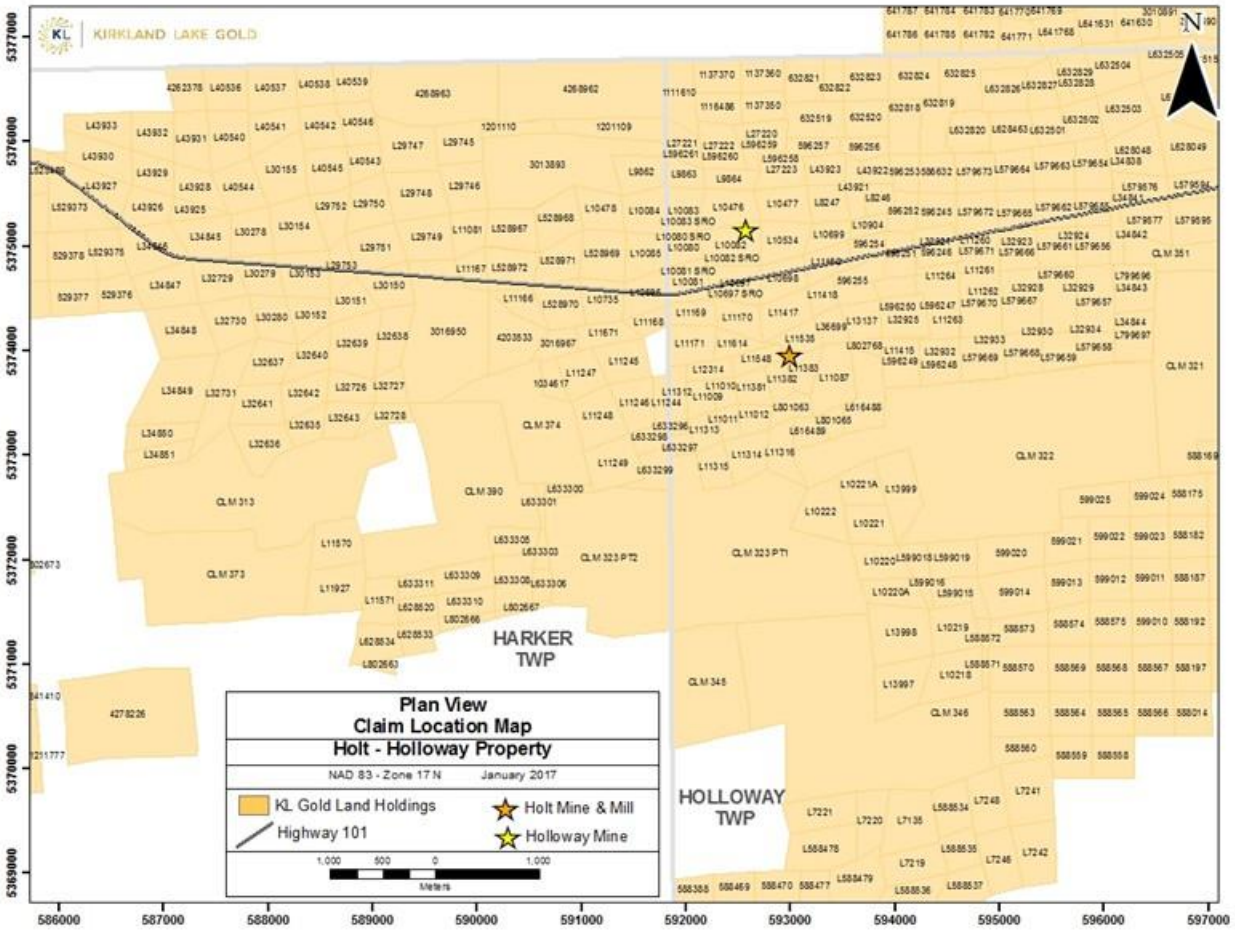

Figure 3-3: Claims location map.

All properties are maintained in good status and there are no encumbrances on the properties.

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.

Agency	Section	Item	Description	Site	Expiration	Status
MOE	1	ECA # 3380-8JBGKZ	Tailings Basin	Shaft #3	N/A	Active
MOE	2	CA # 7071501	Waste Disposal Site (WDS)	Shaft #3	N/A	Active
MOE	3	CA # A770114	Holt-McDermott Mine Dewatering Camp and Drill Water	Shaft #2	N/A	Active
MOE	4	CA # 4-0077-85-006	East Settling Pond	Shaft #3	N/A	Active
		CA # 4-0077-85-006 Rev.1	East Settling Pond	Shaft #3	N/A	Active
		CA # 4-0077-85-006 Notice 1	East Settling Pond	Shaft #3	N/A	Active
MOE	5	CA # 3-0013-87-958	Sewage Treatment Plant	Shaft #3	N/A	Active
		CA # 3-0013-87-958 Notice 1	Sewage Treatment Plant	Shaft #3	N/A	Active
MOE	6	CA # 4-0135-94-956	Mine Water Settling Pond	Shaft #2		Active
MOE	7	Use Permit No. T-94-170	Raised Septic System	Shaft #2	N/A	Active
MOE	8	Use Permit No. M-92-13	Ten Man Camp and Kitchen	Shaft #2	N/A	Inactive
MOE	9	Use Permit No. M-92-14	Twenty Man Camp and Dry	Shaft #2	N/A	Inactive
MOE	10	CA # 70-0008-87-006	Potable Water Plant	Shaft #3	N/A	Active
MOE	11	CA# 7-0657-95-006	Potable Water Treatment System	Shaft #2	N/A	Active
MOE	12	CA #6148-6G8GMP	Mine Ventilation System & Blacktop Exhaust Raise	Shaft #2	-	Active
MOE	13	CA # 3388-4U4KB7 Revoked	Shaft #3 (Holt-McDermott Air Emission)	Shaft #3	N/A	Active
		CA # 5756-65ZNG7 Notice 1			Permit Pending	
MOE	14	CA # 8-5075-94-006	Service Building Ventilation Exhausts	Shaft #2	N/A	Active
MOE	15	CA# 8-6010-95-006	Diesel Engine for Fire Pump	Shaft #2	N/A	Active
MOE	16	CA # 8-6061-95-006	Mine Ventilation System	Shaft #2	N/A	Active
MOE	17	CA # 8-5085-93-957	Backfill Baghouse and Scrubbers	Shaft #2	N/A	Active
MOE	18	CA # 4518-4WRNJS	Fire Equipment, Welding Exhausts, Diesel Generators	Shaft #2	N/A	Revoked
MOE	19	PTTW # 00-P-6063	Construction 2000	Shaft #3	Oct. 31/01	Inactive
		PTTW # 01-P-6013	Construction 2001		May 1/02	Inactive
MOE	20	PTTW #5261-6UXJKV	Holt-McDermott Mine Dewatering Camp and Drill Water	Shaft #3	Oct.. 27/16	Pending
MOE	21	PTTW # 7855-9JEKBC	Mattawasaga & Holloway Lake Water Supply	Shaft #3	Apr. 30/19	Active
MOE	22	PTTW # 5356-9JEKZN	Holloway Mine Dewatering	Shaft #2	Apr. 30/19	Active
MOE	23	PTTW # 2083-9JEKRH	Potable Water Supply	Shaft #3	Apr. 30/19	Active
MOE	24	PTTW # 8655-A4NSNJ	Mine Dewatering and Diamond Drill Hole	Shaft #2	Jan. 05/21	Active
MOE	25	PTTW # 1718-A4NSEJ	Well #1	Shaft #2	Jan. 05/21	Active
MOE	26	PTTW # 2427-A4NS6N	Well #2	Shaft #2	Jan. 05/21	Active
MOE	27	PTTW # 1068-A2FMTF	West Mattawasaga Pit	Shaft #3	Sept. 30/19	Active
MOE	28	MOE Letter	Waste Registration Numbers	Shaft #3	N/A	Active
			On Line Registration for 2002/2003 HWIN			
MOE	29	Waste Generator Registration	Generator No. ON2610201	Shaft #2	N/A	Active
MOE	30	MOE Letter	Magusi River Flow Calibration	Shaft #3		Active
MOE	31	CA # 8-5025-92-006	Underground Backfill	Shaft #3	N/A	Active
TC	1	Transportation of Dangerous Good Registration	TDG Registration	Shaft #2	N/A	Active
MNR	1	No. 15622 No. 33724	Aggregate Permit	Shaft #3	Each Year End Dec. 31st	Active
		No. 17950				
MNR	2	No. TM-KL-77	Plan and Specification Polishing Pond Expansion	Shaft #3		Inactive
MNR	3	Permit # KLK-05-14	Fire Permit	Shaft #2 & 3	Annual	Active
MNR	4	Work Permit KL01-01	Construction 2001	Shaft #3	Mar. 31/02	Active
		Work Permit	Construction 2002-2003		TBA	
DFO	1	Authorization and Amendment	Polishing Pond Expansion	Shaft #3	Oct. 1/05	Active
DFO	2	Sediment and Erosion Protection Acceptance	Polishing Pond Expansion	Shaft #3	N/A	Inactive
AECB	1	No. 08957-1-09.1	Radioisotope License	Shaft #3	Sept. 30/12 ?	Active
MOL	1	T148 C, D,&E	Hoist Permit	Shaft #3	N/A	Active
MOL	2	96047A&B, 96048U,J&K	Explosive Magazines	Shaft #3	N/A	Active
MNDM	1	Closure Plan 2006	Director Acceptance	Shaft #2	N/A	Active
MNDM	2	Closure Plan 2006	Director Acceptance	Shaft #3	N/A	Active
MNDM	3	Closure Plan 2005	Director Acceptance	Blacktop	N/A	Active

Table 3-2: List of Permits.

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 Holt-Holloway property.

4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The following sections are copied (and updated) from the previous technical report (Cater and Salehi, 2015). A summary is presented in the following sub-sections. No material changes occurred since the last technical report was filed in 2015.

4.1 Climate, Topography and Physiography

The climate of the area is typical of northern Ontario with cold winters, warm summers and only moderate precipitation. Climatic conditions in Timmins have been described based on meteorological information from Environment Canada (2010) during the period from 1971 to 2000. The average daily temperature in the Timmins area is recorded as 1.3°C with a daily average low of -17.5°C in the month of January, and a daily average high of 17.4°C in the month of July. An extreme low of -45.6°C was recorded on February 1st, 1962 and the extreme high of 38.9°C occurred on July 31st, 1975. The yearly average precipitation for the Timmins area is 831.3 mm with approximately 67% as rain and 33% as snow. The record daily amount of rainfall, 87.6 mm, occurred on July 29th, 1990 and the record daily amount of snowfall, 48.2 cm, occurred on March 19th, 1983.

All of the property is covered by flat lying to gently rolling terrain with average topographic relief of approximately 40 m. Overburden depths range for 3 to 60 m, with average overburden depth on the property ranging from 5 m to 10 m. Elevations range from approximately 200 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. Outcrop is limited due to an extensive blanket of overburden, mostly sand with lesser amounts of clay from the northerly trending Munro esker. 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 Holt-Holloway property is located in the District of Cochrane, 58 km east of Matheson on Ontario provincial highway 101 and 68 km by road northeast of Kirkland Lake via Ontario provincial highway 66 and Ontario provincial road 672. To reach the property from Toronto, there are daily scheduled flights to Timmins, which is 126 km by road west of the property. From Montreal, there are daily scheduled flights to Rouyn-Noranda, which is 96 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 Holloway and Holt surface facilities are secured behind fenced and gated facilities. Twenty-four hour security service is provided with all personnel and visitors signed in and out of the facilities. Employee and visitor parking are provided outside the gated facilities.

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 already available at the Holt-Holloway property. Water is plentiful in the area and can be sourced from rivers and small lakes. An electric power line connects the mine property to the provincial power grid connecting Kirkland Lake and Larder Lake. The area is well serviced with an array of major roads and two airports (in Timmins and Rouyn-Noranda). The ore is treated at the company's Holt mill. Tailings are managed in four adjoining tailings ponds, two sludge precipitate pond, one water treatment/holding pond (pre-polishing), and one polishing pond, all located southeast of the milling facility. Current capacity of the tailings facility is approximately 7.0 million tonnes, with one minor phase of dam construction remaining. Waste rock is not typically hoisted to surface as it can be used as a source of backfill material for the underground stopes, as needs arise.

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 following sections are copied (and updated) from the previous technical report (Cater and Salehi, 2015). A summary is presented in the following sub-sections. No material changes occurred since the last technical report was filed in 2015

Because of the duality of original ownership of the Holloway and Holt mining operations, the history of each is treated separately in this section.

5.1 Holt Property Prior Ownership

In 1922, P.A. McDermott discovered gold in northwestern Holloway Township and, over the next four years, did some trenching and limited drilling on the prospect. McDermott Gold Mines Ltd. was incorporated and eventually ten contiguous claims were patented. A small drilling program was carried out in 1937; however, no further work was done until Sylvanite Gold Mines Ltd. optioned the property in 1948-1950 and drilled 11 holes totalling 925 m along 76 m of strike. In 1950, McDermott Gold Mines Ltd. became McDermott Mines Ltd.

In 1981, Camflo Mines Ltd. formally optioned the McDermott claims and staked a large surrounding area. Through 1983, Camflo carried out exploration, drilled 53 holes, and optioned the adjacent Worvest, Lenora, Canamax, and Newmex claims. In 1984, Barrick (then Barrick Resources Corp.) amalgamated with Camflo and, by year end, 120 holes had been drilled. By October 1985, encouragement was sufficient to begin an exploration shaft to an initial depth of 420 m, with development work on two levels. A production decision was made in October 1986, and production at 1,400 tpd began in 1988. In September 2004, the mine was shut down, having produced 1.32 million ounces of gold from 7.5 Mt of ore with a recovered grade of 5.5 g/t. SAS declared commercial production at the Holt mine in 2011.

KLG completed the acquisition of SAS in January 2016.

5.2 Holloway Property Prior Ownership

In 1922, gold was discovered on claims adjacent to the current property. From that time until the late 1930s, Teddy Bear Valley Mines, Ltd. (Teddy Bear) carried out an exploration program that included some underground development. This work did not generate any interest in the property. In the mid-1980s, Teddy Bear renewed exploration drilling on its claims and Noranda Exploration Company, Limited (Noranda) began drilling on adjacent claims. These new programs encountered significant sericite-ankerite alteration and weak gold mineralization at depth.

In 1988, drill holes from both properties intersected the upper portion of the deposit, now known as the Lightning Zone, which tops out at approximately 150 m below surface. Noranda then formed a joint venture to earn an interest in the Teddy Bear property. In July 1991, Hemlo Gold Mines Inc. (Hemlo) acquired Noranda's interest in the Holloway project and surrounding claims. The Holloway Joint Venture was formed in 1992 to fund, develop, and operate the two properties as one mine.

The underground validation program in 1992 included a 441 m exploration shaft, 25,600 m of additional diamond drilling, and an 8,500 t bulk sample to study the ore metallurgy. A feasibility study completed in 1994 moved the property ahead into the production-development phase. A total of $55 million was committed to build the surface and underground infrastructure. The mine went into full production on October 1, 1996. That same year, Hemlo Gold Mines Inc. merged with Battle Mountain Gold Company. In January 2001, Newmont merged with Battle Mountain Gold and the Holloway Mine was operated by Newmont Canada Limited. In October of 2004, Newmont acquired the Holt-McDermott Mill and Mine assets from Barrick Gold Corporation (Barrick) and thus controlled 100% of the Holloway-Holt Project assets and land position. To date, the Holloway Mine has produced 0.90 million ounces of gold from 5.1 Mt of ore with a recovered grade of 5.5 g/t gold. In early 2006, Newmont placed the Holloway Mine on care and maintenance. SAS re-opened the Holloway mine in 2009.

KLG completed the acquisition of SAS in January 2016.

5.3 Historical Mineral Resources and Mineral Reserves

In April 2006 Scott Wilson RPA estimated mineral resources (Table 5-1) using polygonal and sectional methods, depending on the diamond drill density.

		Tonnes ('000 t)	Grade (g/t)	Cont. Gold ('000 oz)
Holloway Mine	Measured	537	6.7	115
	Indicated	500	8.9	144
	Measured + Indicated	1,037	7.8	259
	Inferred	477	6.3	97
Holt Mine	Measured	191	8.1	50
	Indicated	2,794	7.3	655
	Measured + Indicated	2,985	7.3	704
	Inferred	677	7.9	173
Holloway + Holt	Measured	728	7	165
	Indicated	3,294	7.5	799
	Measured+Indicated	4,022	7.4	963
	Inferred	1,154	7.3	270

Notes:
1) CIM definitions were followed for Mineral Resources.
2) Mineral Resources were estimated at a marginal cutoff grade of 3.0 g/t Au and a block cutoff grade of 4.5 g/t Au.
3) Mineral Resources were estimated using an average long-term gold price of US$500 per ounce, and a US$/C$ exchange rate of 1.25.
4) A minimum mining width of 2.0 to 3.0 metres was used.
5) Columns may not add exactly due to rounding.

Table 5-1: Holt-Holloway mineral resources, as of April 30, 2006 (After SWRPA, 2008).

Following the April 2006 mineral resource estimate, SAS has diamond drilled and/or reinterpreted approximately 75% of the mineralized zones on the Holloway-Holt Project. The remaining 25% was not re-assessed and thus the 2006 estimate remained current for that portion.

Mineral resources were updated in June 2008 by SAS staff and endorsed by SWRPA (Table 5-2).

Mineral reserves were updated in June 2008 by SAS staff and endorsed by SWRPA (Table 5-3).

		Tonnes (000 t)	Grade (g/t Au)	Contained Gold (000 oz)
Holloway Mine	Measured	850	7.2	196
	Indicated	81	7.0	18
	Meas + Ind	931	7.1	214
	Inferred	447	6.3	91
Holt Mine	Measured	1,323	6.6	283
	Indicated	1,914	6.8	422
	Meas + Ind	3,237	6.7	705
	Inferred	1,066	7.7	265
TOTAL Holloway and Holt	Measured	2,173	6.8	479
	Indicated	1,995	6.8	440
	Meas + Ind	4,168	6.8	919
	Inferred	1,513	7.3	356

Notes.
1) CIM definitions were followed for Mineral Resources.
2) Mineral Resources were estimated at a marginal cutoff grade of 3.0 g/t Au and a block cutoff of 4.5 g/t Au.
3) A minimum mining width of 2.0 m to 3.0 m was used.
4) Columns may not add exactly due to rounding.
5) Mineral Resources are inclusive of the Mineral Reserves.

Table 5-2: Holt mineral historical resource estimate, as of 2008 (After SWRPA, 2008).

			Tonnes ('000)	Grade (g/t)	Ounces ('000)
Holloway	Blacktop Footwall Upper	Proven	288	6.7	62
	Blacktop Footwall Upper	Probable	40	6.7	9
	Blacktop Footwall Lower	Probable	170	5.6	31
	Blacktop Lightning	Probable	53	5.8	10
	Lightning Zones	Probable	181	5.4	31
		Proven	288	6.7	62
		Probable	444	5.6	80
	Subtotals	Proven+Probable	732	6.1	142
Holt	C103	Proven	102	6.3	21
	C103	Probable	19	6	4
	Zone 4	Probable	1,250	5.2	208
	Zone 6	Probable	905	5.7	166
	Tousignant	Probable	150	7.9	38
	Zone 1, 5, 8, 8F & Stope 4, 5	Probable	254	6.1	50
		Proven	102	6.3	21
		Probable	2,578	5.6	466
	Subtotals	Proven+Probable	2,680	5.6	486
	Stockpile	Proven	5	3.3	1
		Proven	395	6.6	84
		Probable	3,022	5.6	546
Totals		Proven+Probable	3,420	5.7	629

Notes:
1) CIM definitions were followed for Mineral Reserves.
2) Mineral Reserves are estimated using an average long-term gold price of US$775 per ounce and an exchange rate of C$1.00 = US$0.87.
3) A minimum mining width of two metres was used.
4) Rows and columns may not add exactly due to rounding.
5) Mineral Reserves are included within the Mineral Resources

Table 5-3: Holt-Holloway historical mineral reserves estimate, as of 2008.

Mineral Resources for the Holt and Holloway Mine Complex were estimated by B. Harwood P. Geo., of KLG (formerly SAS) for the past 3 years (Table 5-4 and Table 5-5).

	Measured			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)	Tonnes (kt)	Grade (g/t)	Cont. Gold (koz)
2016	3,955	4.32	549	3,017	4.10	398	6,972	4.22	947	8,694	4.74	1,324
2015	4,377	3.94	554	4,524	3.79	551	8,901	3.86	1,106	10,316	4.31	1,429
2014	3,702	3.97	473	3,860	3.91	485	7,563	3.94	958	7,865	4.67	1,180

Notes
CIM definitions (2014) were followed in the estimation of Mineral Resource
Mineral Resources are reported Exclusive of 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 2.5 g/t or 2.9 g/t depending on zone
Mineral Resources are estimated using a long term gold price of US$1,200/oz (CDN$1,500/oz) in 2016
A minimum mining width of 3m was applied
A bulk density of 2.84 t/m3 was used
Totals may not add exactly due to rounding

Table 5-4: Holt Mine Mineral Resource Estimate 2014-2016, as of December 31, 2016.

	Measured			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)	Tonnes (kt)	Grade (g/t)	Cont. Gold (koz)
2016	156	4.11	21	1,211	5.39	210	1,367	5.25	231	2,712	5.23	456
2015	321	5.64	58	505	4.44	72	825	4.91	130	2,712	4.86	424
2014	310	4.71	47	482	4.54	70	792	4.61	117	2,479	4.88	389

Notes
CIM definitions (2014) were followed in the estimation of Mineral Resource
Mineral Resources are reported Exclusive of Reserves
Mineral Resource estimates were prepared under the supervision of D. Cater, P. Geo.
Mineral Resource estimates were undertaken according to KLG Policy for Mineral Reserve and Resources
Mineral Resources were estimated in 2016 at a block cut-off grade of 3.9 g/t depending on zone
Mineral Resources are estimated using a long term gold price of US$1,200/oz (CDN$1,500/oz) in 2016
A minimum mining width of 3m was applied
A bulk density of 2.84 t/m3 was used
Totals may not add exactly due to rounding

Table 5-5: Holloway Mine Mineral Resource Estimate 2014-2016, as of December 31, 2016

5.4 Exploration and Development Work on the Holt-Holloway Property

Mineral exploration and development on and around the subject properties began with prospecting around 1918 and have continued to this day through episodes of exploration and occasional production. The initial and very general geological map of the area was produced by the Ontario Bureau of Mines in 1909. This was followed with better detail in the reconnaissance mapping of the Abitibi-Night Hawk gold area in 1918. Prospecting and exploration in the various local townships began in earnest thereafter and continued through the 1940s, with occasional underground programs and minor local production mostly from surface workings. Interest in the area was greatly accelerated in 1944-1945, when it was demonstrated that the Porcupine-Destor Fault (PDF) traversed the area. Significant production has only been in recent times from the Holloway and Holt-McDermott mines.

The current land package, more recently known as the Golden Highway property, extends eastwards 40 km along Highway 101 from eastern McCool and Michaud townships, through Garrison, Harker, and Marriott townships to the Quebec border. Apart from the main Holloway and Holt-McDermott properties, the bulk of the remaining holdings derive from claim packages assembled over the years by Noranda Exploration Company, Limited (Noranda), Canamax Resources Inc. (Canamax), and Lightval Mines Limited (Lightval). The Golden Highway – Moneta claim blocks in Garrison, Holloway, and Marriott townships were originally staked by the Noranda associate company, Mining Corporation. In 1945, Moneta Porcupine Gold Mines entered into an agreement with Noranda and subsequently attained a 40% interest in the property. Work completed included prospecting, magnetic surveys, and a total of 13 holes drilled mostly on the Garrison Township claims. In 1980, Noranda completed more work on the Garrison block and drilled one hole to test an electromagnetic (EM) anomaly. Canamax entered into an agreement with Noranda-Moneta in 1983, and between 1984 and 1988 completed extensive geophysics and drilling on the Moneta properties.

Much of the Golden Highway property was assembled in the mid-1980s through staking and work options by Rosario Resources, subsequently Canamax. In January 1990, Noranda entered into an option agreement with Canamax covering 411 patented, unpatented, and leased mining claims. In mid-1991, Noranda assigned its rights to earn an interest in the properties and operatorship to Hemlo. In January 1993, Canamax amalgamated with Canada Tungsten Mining Corp. and Minerex Resources Ltd. to form Canada Tungsten Inc. (Canada Tungsten). In late 1996, Canada Tungsten merged with Aur Resources and, at the time, Aur had a 50% interest in the joint venture properties. In January 1996, Hemlo became vested as a 50/50 joint venture partner after having fulfilled all the required work commitments and having made all the necessary option payments. In July 1996, Hemlo merged with Battle Mountain Gold Company and the Golden Highway assets were vested in Battle Mountain Canada Ltd. (BMC). Battle

Mountain Gold subsequently merged with Newmont Mining Corporation in January 2001 and the BMC interests were transferred to Newmont.

The 60 claim Lightval property was under option to Newmont Mines Limited (Canada) in 1986-1989 and Noranda in 1989-1992, but was ultimately acquired by Newmont through a 1999 option agreement. Newmont acquired the Holt-McDermott Mine and Mill assets from Barrick in October of 2004.

Throughout the period described above, a variety of conventional exploration techniques were employed to investigate the gold potential of the various properties. Considerable ground geophysics was done, mostly magnetometer and induced polarization (IP) surveys. Soil and humus sampling for gold was done locally and trenching was attempted in certain areas of shallow overburden. The most useful and definitive exploration procedure was diamond drilling and core assaying. This was the only way that altered, and gold-mineralized zones were located and delineated.

5.5 Historical Production from the Property

Production records for the Holt-Holloway Property are shown in Table 5-6.

Year	Holt Mine			Holloway Mine		
	Tonnes Processed	Ounces Gold Recovered	Recovered Grade (g/t)	Tonnes Processed	Ounces Gold Recovered	Recovered Grade (g/t)
1988	219,526	23,993	3.40	-	-	-
1989	507,148	63,354	3.89	-	-	-
1990	466,708	59,164	3.94	-	-	-
1991	594,572	60,727	3.18	-	-	-
1992	418,999	47,481	3.52	-	-	-
1993	388,116	64,219	5.15	-	-	-
1994	367,699	59,872	5.06	8,556	1,844	6.70
1995	382,470	66,389	5.40	79,701	10,750	4.20
1996	438,894	117,621	8.34	190,075	37,149	6.08
1997	418,795	116,368	8.64	381,459	62,793	5.12
1998	497,122	134,379	8.41	467,134	94,781	6.31
19 99	501,794	106,701	6.61	487,317	107,780	6.88
2000	487,127	91,470	5.84	530,865	109,918	6.44
2001	449,793	83,142	5.75	551,963	105,417	5.94
2002	471,427	83,947	5.54	552,064	103,633	5.84
2003	506,905	89,514	5.49	506,633	79,245	4.87
2004	357,521	55,014	4.79	516,134	79,966	4.82
2005	-	-	-	531,012	71,747	4.20
2006	-	-	-	136,151	20,748	4.74
2007	Included in Holloway			153,163	14,471	2.94
2008	3,485	416	3.71	4,966	592	3.71
2009	-	-	-	101,941	18,712	5.71
2010	23,257	2,022	2.70	340,594	57,459	5.25
2011	232,330	32,376	4.33	204,258	21,461	3.27
2012	316,487	50,444	4.96	191,471	21,629	3.51
2013	369,657	58,898	5.22	177,005	21,330	4.13
2014	442,108	62,633	4.65	186,238	23,780	4.36
2015	426,614	63,048	4.85	180,210	28,720	5.45
2016	416,048	57,086	4.52	203,130	28,135	4.86
Total	9,704,602	1,650,278	5.29	6,682,040	1,122,061	5.22

Table 5-6: Holt-Holloway Property historical production.

6.0 GEOLOGICAL SETTINGS AND MINERALIZATION

6.1 Regional Geology

The Holloway and Holt mines lie within the Southern Abitibi Greenstone Belt (SAGB) of the Superior Province in north-eastern Ontario. The 40 km long, mostly contiguous Holt-Holloway property package is a grouping of strategically located claims straddling the Porcupine-Destor Fault Zone ("PDF") midway along its 260 km length. The defining structural characteristic of the property package and the most important feature from an economic geology viewpoint is the PDF, around which a multitude of gold showings and prospects are clustered. The Holloway and Holt mines are located opposite each other, approximately one kilometre apart, on the north and south sides of the PDF, respectively (Figure 6-1).

In very general terms, the Abitibi Sub-province consists of Late Archaean metavolcanic rocks, related synvolcanic intrusions, and clastic metasedimentary rocks, intruded by Archaean 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.

The structural grain is also dominated by east-west trending Archaean 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 southern part of the Abitibi greenstone belt, in the general vicinity of the Holt-Holloway mines, consists of three major volcanic lithotectonic assemblages and two unconformably overlying metasedimentary assemblages.

The evolution of the SAGB in the region of the Holloway-Holt Project spans a period of at least 60 Ma from approximately 2,723 Ma to approximately 2,660 Ma and includes volcanism, sedimentation and plutonism. All rocks are at greenschist to upper greenschist grade of metamorphism.

After 2,696 Ma, the tectonic regime shifted from volcanic construction to that dominated by deformation, plutonism and erosion accompanied by development of localized basins infilled by sedimentary and volcanic rocks.

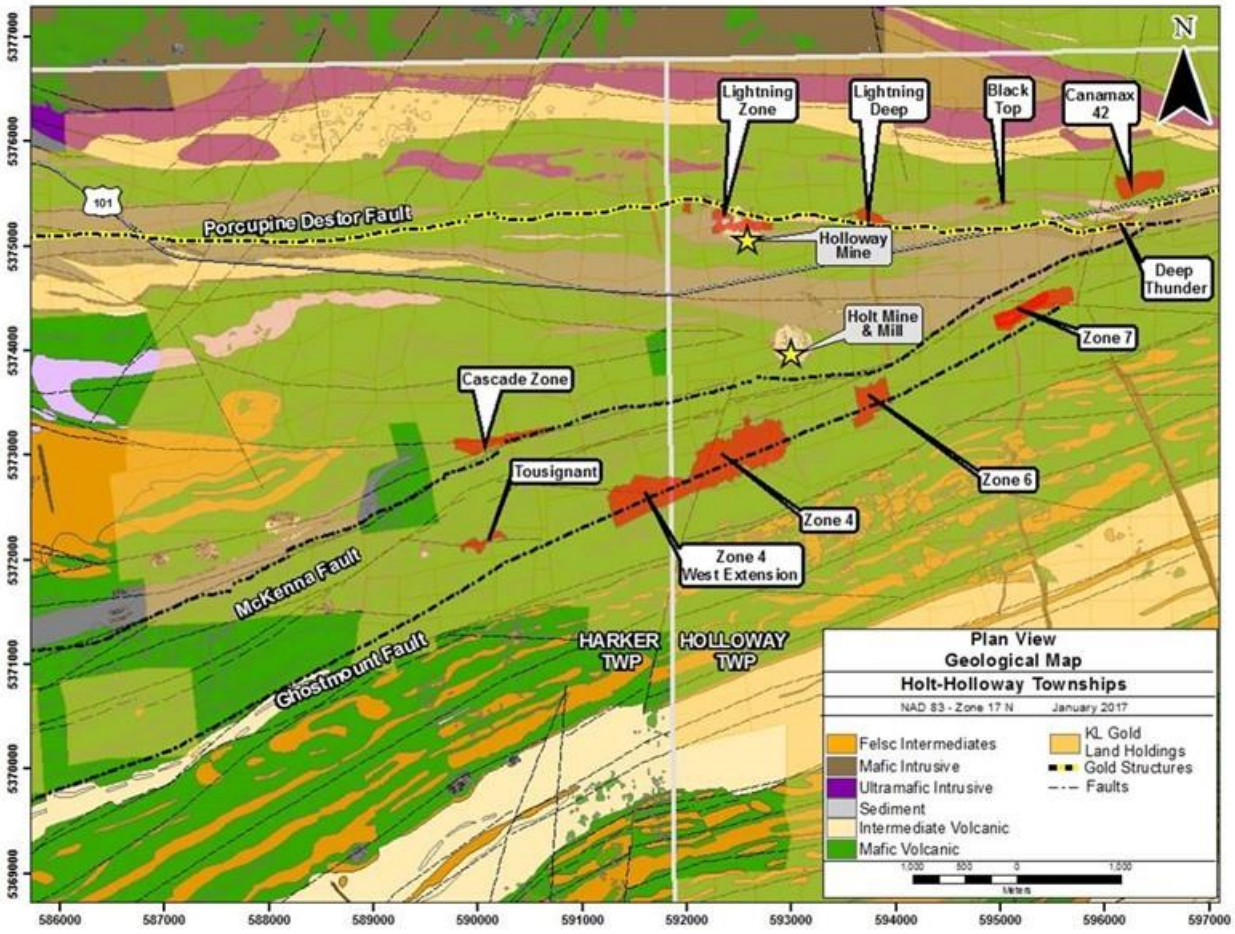

Figure 6-1: Holt and Holloway mines regional geology.

6.2 Local and Property Geology

6.2.1 Local Geology

The deformation history of the area is defined by five events. The earliest episode of regional D1 deformation (compression and extension) predated the Porcupine angular unconformity at 2,690 Ma. The D2 event (compression and extension) post-dated the Porcupine assemblage and resulted in localized folding and thrusting and early south-side up, dip-slip, ductile deformation on regional deformation zones. Broadly synchronous with the syntectonic opening of the Timiskaming basins in dilatational jogs was D3 folding that resulted in significant left lateral slip movement along the PDF. The

D4 folding event created synclines within the Timiskaming assemblage rocks and right-lateral strike-slip displacement along the PDF. The D4-D5 event represents the final stage of transpressional deformation along the PDF. Gold mineralization in the Holt-Holloway area is interpreted to be early D3 in age. Lightning Zone replacement mineralization is cut by an inter-mineral dike with an age of 2672 ± 1.9Ma, which is overprinted by a later auriferous quartz-carbonate veining event. The bulk of the gold in the Timmins area was related to late D3 events.

Gold mineralization at the Holt and Holloway mines comprises replacement carbonate-pyrite-albite-quartz alteration that overprints mafic volcanic rocks in, and adjacent to, D3-D4 high strain zones (Figure 6-2).

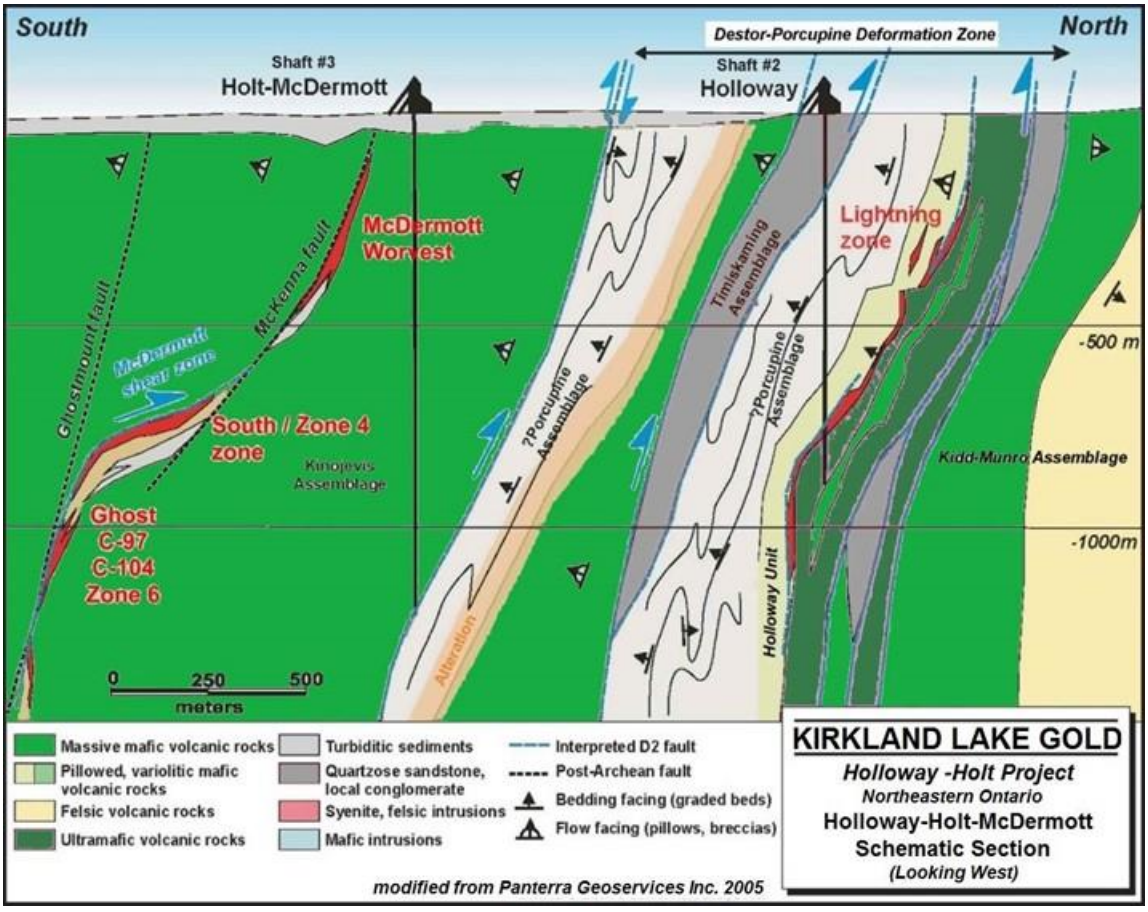

Figure 6-2: Holt and Holloway properties geology (cross sectional view, looking west).

6.2.2 Holt Property Geology

The Holt Mine Complex is situated on the eastern portion of the PDF. Interpretations are made through diamond drilling and underground mapping within the mine complex. As a mafic volcanic deposit, the lithology is mainly Fe-tholeiitic basalts with minor intrusive syenites, which may be up to 2m thick. Syenites cross cut the main mineralized trend potential as conjugate faults. Mineralization is present mainly on the hanging wall side of the Ghostmount Fault. The lower portion of Zone 4 shows a steeper change in dip showing possible rolling of the zone through a fold or offset fault. Additional descriptions about the geology and mineralization for the main zones can be found in Section 7.1.1.

6.2.3 Holloway Property Geology

The Holloway deposit is hosted by the 30 m to 150 m wide Holloway unit, a south dipping band of Fe-tholeiitic mafic volcanic rocks that is bounded to the south and north by south facing turbiditic sedimentary rocks and komatiitic ultramafic volcanic rocks, respectively. Further geological and mineralization descriptions for the main zones are present in Section 7.1.2.

7.0 DEPOSIT TYPE

At Holt-Holloway, the deposit is a mafic volcanic hosted where the gold mineralization is quite unlike the classical Superior province auriferous quartz vein systems resulting from deformed, extensional fracture arrays. Rather, it is associated with disseminated sulphides in altered rock, sometimes described as replacement mineralization. Mineralization typically consists of moderately to steeply dipping tabular zones of disseminated pyrite (generally less than 5 per cent per volume) and gold in intensely altered tholeiitic basalt, with variably developed microveinlet stockworks. The ore is gold rich (Au:Ag is greater than 5) and contains concentrations of arsenic. The mineralized zones occur in a variety of geological settings reflecting a variety of controls on the localization of the mineralization: along low-strain lithological contacts (Lightning, Blacktop and Lightning Deep zones at Holloway), along brittle and/or ductile faults (McDermott, Worvest and Mattawasaga zones), and as shallowly dipping discordant zones (Tousignant, South Zone and Zone 4) of which the South Zone (Holt) is spatially coincident with an array of shallowly dipping syenitic dykes.

Mineralized zones are coincident with zones of intense albite-ankerite alteration of the host basalt, which, in turn, are partly fringed by sericite alteration haloes at Holloway and fringed by broader zones of calcite alteration. Disseminated specular hematite can be present within or outboard of mineralized zones.

Gold mineralization at the Holt and Holloway Mines is associated with replacement carbonate-pyrite-albite-quartz alteration that overprints mafic volcanic rocks in, and adjacent to, D3-D4 high strain zones. The overprinting of multiple mineralization phases in the same area suggests that mineralization was long lived and spanned syn-tectonic deformation during exploitation of the same fluid channel ways.

7.1.1 Holt

At the Holt Mine, mineralized zones that have been historically mined are hosted by the McDermott shear zone, a 10 m to 50 m wide south-southeast dipping carbonate-sericite-chlorite ± albite altered ductile D3-D4 shear zone, which is hosted by otherwise massive, and generally low strain mafic volcanic rocks. The McDermott shear zone has been traced laterally for approximately 10 km along strike, joining the PDF corridor to the northeast. It has been traced by drilling at least eight kilometres west of the Holt Mine headframe. The shear zone may be localized along an older D2 thrust plane that has structurally emplaced lenses of fine-grained clastic sedimentary units along it. Principal mineralized zones that have been mined to date along the structure include the South, C-104, McDermott, Worvest/Three Star, Mattawasaga, and C-97 zones, which occur over a strike length of three kilometres and have been mined to depths of over one kilometre below surface.

More recently, the C-103, Zone 4 and Zone 6 gold mineralization has been identified along these geologic structures and are host to the bulk of the existing gold mineralization. All but the South Zone and Zone 4 occur in steeply south dipping sections of the shear zone. The South Zone and Zone 4 occur where the shear zone rolls to moderate to shallow southerly dips (Rhys, 2005a). Prominent within the Holt Mine geology are two northeast to east-northeast trending brittle faults: the Ghostmount and the McKenna. Although once interpreted as mineralization controlling structures, they offset mineralization and are in fact the youngest structural elements in the region (Rhys, 2005a).

Mineralization frequently occurs within the upper (hanging-wall/south) portions of the McDermott shear zone, often in areas where the structure defined by its carbonate-sericite-quartz altered high strain zone widens from a thickness of generally less than 10 m to locally greater than 50 m wide. The widening may in part be controlled by the interaction of the shear zone with lenses of carbonaceous sedimentary rocks in its footwall. Mineralization occurs in massive to banded quartz-carbonate-pyrite-albite alteration that occurs within the McDermott shear zone and may extend a short distance into adjacent, unfoliated, massive mafic volcanics. Diffuse quartz veinlet networks and matrix are commonly developed, locally imparting breccia textures in sheared rocks. The apparent overprinting of foliation by alteration, and rotation of shear zone fabrics in breccia fragments, collectively suggest that mineralization overprints portions of the McDermott shear zone, and that it formed during or after most shear zone fabric development. An early phase of hematite-bearing carbonate-albite-quartz alteration is often preserved as lenses and domains within and adjacent to the Holt Mine mineralized zones (Rhys, 2005a).

Zones 4, 6 and C-103 at the Holt Mine have a well- established higher grade gold zone (i.e. greater than 3 g/t Au) related to a zone of more intense alteration, including sericite, chlorite, hematite and silicification, and elevated concentrations of sulphides within an overall lower grade envelope. This higher grade zone, typically three to five metres thick, is almost exclusively located along the hanging wall of the deposit, against the Ghostmount fault or any associated fault splay. The zones typically extend over 100 m along strike and 100 m down dip. Figure 7-1 depicts the deposits present on the Holt Mine Complex.

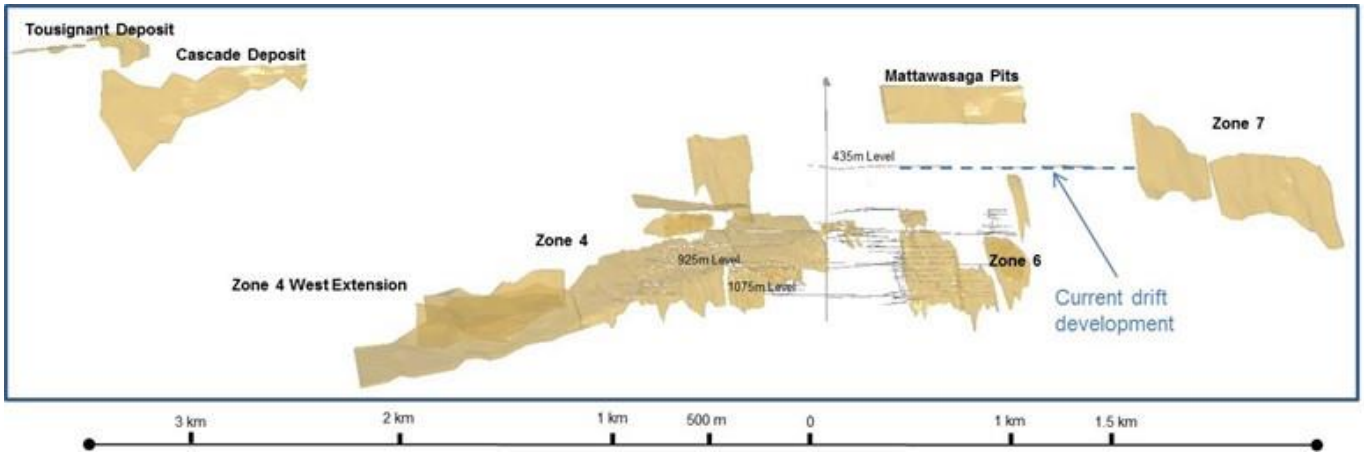

Figure 7-1: Vertical Longitudinal section of the Holt Mine Complex.

South Zone / Zone 4

Zone 4 (the down plunge extension of the South Zone) at the Holt Mine is flatter lying than the other property deposits, which occur on the McKenna and Ghostmount faults, and are typically vertical to sub-vertical. Zone 4 occurs where the shear zones rolls to a moderately shallow southerly dip. This zone is related to a zone of more intense alteration, including sericite, chlorite, hematite and silicification, and elevated concentrations of sulphides within an overall lower grade envelope. This higher grade zone, typically three to 20 m thick, is almost exclusively located along the hanging wall of the deposit, against the hanging wall fault or any associated fault splay. This zone extends over 1,000 m along strike and 400 m down dip. Gold values in Zone 4 die out laterally, over several metres within the envelope of altered rock. There is generally a fairly sharp boundary on the hanging wall side along the hanging wall fault structure, but a more gradational die off of values on the footwall side.

Zone 6

Zone 6 is one of the more recently discovered deposits hosted by the McDermott shear zone. Mineralization occurs in steeply south dipping sections of the shear zone. This higher grade zone, typically three to eight metres thick, is almost exclusively located along the hanging wall of the deposit, against the Ghostmount fault, with less consistent lens of mineralization along the gradational foot wall contact, where the contacts of the mineralization are generally sharp with the surrounding mafic volcanic rocks.

This zone typically extends over a 200 m strike length and 400 m down dip and is open to the east and down dip below the 1075 m level. During 2012 over 21,000 m of diamond

drilling was completed above the 775 m level to confirm and expand Zone 6 up dip and to the East.

Zone 7 (formerly Ghost Zone)

The Zone 7 mineralization was discovered in 2000 approximately one kilometre east-northeast of the Mattawasaga mineralized zone. The discovery hole, drilled 250 m east of the Holt property boundary, intersected the zone at a vertical depth of 450 m and encountered a broad zone of mineralization returning 3.47 g/t over 32 m and 5.47 g/t over 4 m. Subsequent drilling at approximately 200 m offsets encountered lesser values; however, notable intercepts included 2.64 g/t over 13 m and 2.12 g/t over 14 m, and broad low-grade composites, including 0.68 g/t over 23 m, defined the extremity of the system.

In 2001, Newmont drilled two holes to test the extent of the Zone 7. One hole, approximately 1.7 km to the east, tested 300 m below surface and the second hole, 500 m east of previous drilling, tested to 520 m below surface, in the plunge direction of the zone. Both holes encountered modest alteration with weak gold values but did not particularly define any limits to the Zone 7. In 2005, Newmont drilled five more holes totaling 2,480 m to the west of the zone. Each hole intersected good alteration and modest gold values, such as 3.49 g/t Au over 2.0 m. Similar to the Mattawasaga and Zone 6 deposits, mineralization is hosted by the McDermott shear zone, and occurs in steeply south dipping sections of the shear zone. This higher grade zone, typically three to eight metres thick, is almost exclusively located along the hanging wall of the deposit, against the Ghostmount fault. During 2010 and 2011 SAS drilled 55 holes for over 30 km of drilling. In late 2012, a new mineral resource was calculated.

Tousignant

Gold mineralization is typical Holt mineralization and is very similar to that of Zone 4 and C-103. Gold is associated with disseminated pyrite and intense albite/silica alteration. The zone is characterized by two structural components: a flat south west dipping component in the form of a lens shaped alteration package and a steep south dipping component concordant to a fault belonging to the Ghostmount shear. There is an apparent thickening of the mineralization envelope near to where the two aforementioned structural components intersect.

A 3 g/t Au envelope is completely haloed by a lower grade envelope in the flat zone whilst the vertical zone is typically thinner but, unlike the thicker flat zone, a continuous higher grade envelope cannot be distinguished. The flat zone is typically two to five metres thick whilst the vertical zone is about one to three metres in thickness, thickening slightly towards its upper limits.

Although the flat zone was fairly continuous, some lower grade material was included for the purpose of realizing a continuous mineralized zone.

Cascade

Cascade Zone, part of the historic Lenora claim group is located 2km west south west of the Holt shaft (Figure 7-2). Exploration began in 1984 with several diamond drill holes intersecting narrow mineralized lenses along the McKenna Fault. The McKenna Fault is a steeply south dipping late brittle structure part of the McDermott Shear Zone. Mineralized lenses consist of silicified brecciated mafic volcanic rock with hematite and sericite alterations chlorite carbonate stringers and disseminated pyrite. The mineralized zone is found on the hanging wall side of the McKenna Fault, a 2-5cm grey clay gouge. Cascade Zone is also located 400m east of the historic non-compliant resource of Card Lake (Figure 7-2). 2017 drilling aims to expand the zone down its open dip and plunge to the west with hopes to connect Cascade and Card Lake.

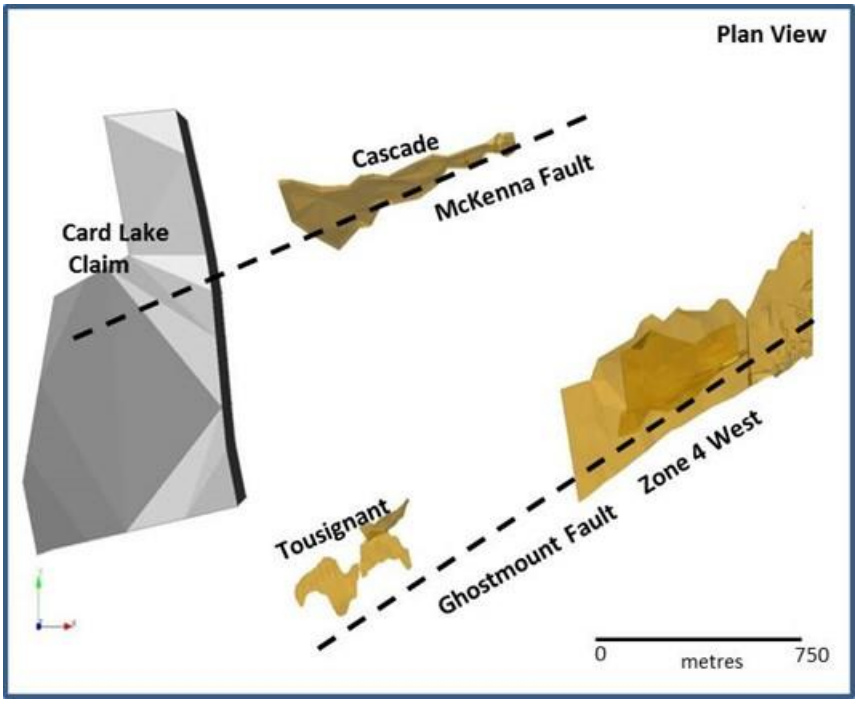

Figure 7-2: Cascade Deposit and Card Claims relative to Holt Zone 4 West (plan view).

7.1.2 Holloway

Mineralization occurs where a 200 m to 300 m wide corridor of east-northeast trending D2-D3 high strain zones obliquely crosses the Holloway unit, resulting in a deflection in its strike to east-northeast trends from east to west-northwest trends that are more typical at the property scale (Rhys, 2005a). Mineralization in the Holloway Mine is present within the Lightning and Lightning Deep, Middle, Blacktop, and Sediment zones. **Error! Reference source not found.** Figure 7-3 depicts the deposits present at the Holloway Mine.

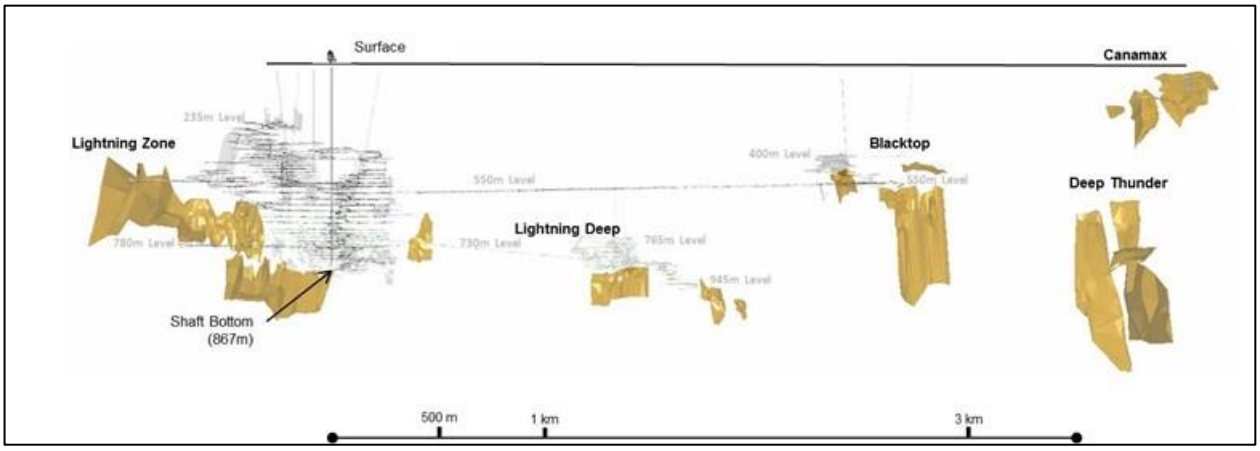

Figure 7-3: Longitudinal View of the Holloway Deposit (looking North).

Lightning Zone

The Lightning Zone is host to by far the largest zone at the Holloway Mine. Mineralized bodies trend east-northeast. It comprises a series of generally interconnected lenses of pyritic replacement carbonate-quartz albite-pyrite zones developed adjacent to and within the high strain zones that overprint earlier formed albite-hematite alteration that preferentially replaces variolitic flow units. Gold most often occurs along the pyrite grain boundaries or, less often, along fractures in pyrite grains. Accessory arsenopyrite, chalcopyrite, sphalerite, and scheelite are very minor constituents overall. Gold grain sizes average 5 µm to 9 µm and visible gold is rare.

Lightning Deep (Formerly Smoke Deep)

The Lightning Deep mineralized zone is hosted within mafic-volcanic rocks that display varying textures and structures. Within the mafic-volcanic lithologies the mineralized area is hosted within an alteration assemblage that has a variable composition. The

alteration ranges from strongly silicified, with accessory sericite, albite and hematite to a less silicified, strongly sericitized unit. The majority of mineralization occurs within a dark to light grey silicified host where the gold mineralization is associated with pyrite and occupies a stock work within the host rock. Unlike the Blacktop zone, the alteration zone and associated gold mineralization does not always lie in direct contact with the lower ultramafic suite of rocks; however, in some locations the alteration zone does come in contact with the lithological boundary between the ultramafics and mafic-volcanics and, as a result, so does the mineralized zone. Despite the alteration zone and resulting gold mineralization not consistently being in direct contact with the above mentioned lithological contact the orientation of the mineralized zone closely mimics the orientation of this lithological boundary.

Middle Zone

In addition to the quartz vein related mineralization associated with the flat faults, a series of north-trending, moderate to steep east-dipping quartz-tourmaline shear veins occur in the Middle Zone, west of the main Lightning Zone mineralized body. The veins are developed in narrow reverse shear zones and are probably intermediate in age between the Lighting Zone and flat fault related quartz veining episodes. These veins are quartz dominated and contain variable quantities of black tourmaline as ribbons and stylolites. They have auriferous pyritic envelopes and outer sericite-carbonate alteration.

Blacktop Zone

The Blacktop “flat fault” falls within the range of orientation of flat faults in the Holloway Mine, although it has slightly steeper southerly dips than most of these. Mineralization along the flat fault at the Blacktop Zone is predominantly Lightning Zone in style, comprising a tabular zone of grey albite-carbonate-pyrite-quartz mineralization. In general, the gold mineralization and associated alteration and sulphide mineralization at the Blacktop zones has sharp boundaries with the surrounding volcanic rocks with higher grade values (i.e. more than 10 g/t Au) disseminated throughout. As such, the entire mineralized – altered zone was modelled and it is envisioned that the entire mineralized zone from hanging wall to footwall would be mined given that it would be difficult to predict any higher grade trends within this mineralized zone.

8.0 EXPLORATION

The Holt-Holloway property has a mix of mining and exploration assets. The property package comprising claims, patents, and mining leases covers an area of 115 km^2, straddling 40 km of the regionally important PDF. This large and coherent land holding in an old and productive gold belt, with numerous gold deposits and showings focused along the PDF speak to the excellent exploration potential of the area. With four operating mines and a mill in the district provide KLG with a substantial advantage in the belt.

The exploration potential on the Holt-Holloway property can be divided into three equally prospective areas:

- Within the immediate mine areas, typically strike and dip extensions;
- Within and immediately adjacent to the gold mineralization previously discovered, namely at Holloway on the Lightning Deep, Blacktop, Canamax and Seagar Hill property segments and at Holt on the Zone 4 west extension, V-93 (vertical extension) and McKenna zones; and,
- In new areas where conceptual exploration targets have been generated based on both past and recent theories that predict the controls on the location of gold mineralization. Holloway mineralized plunge junction, west of Tousignant, and associated with the Howey-Cochenour trend.

8.1 Mine Area

In addition, there remains excellent potential to add to the current mineral resource base immediately adjacent to the Holloway and Holt deposits that can be accessed from the present underground workings. This includes, but is not limited, to the following areas (Figure 8-1 and Figure 8-2):

- Down plunge extension of Zone 4, V93 and McKenna zones at the Holt Mine;
- Westwards along the hinge line formed by the known deposits within the Holt Mine where additional zones of mineralization may exist;
- Zone 6B: Potential to the east of this zone, beyond current mine workings;
- Zone 1: There is potential to investigate in this zone, 50 m below the 1075 Level;
- Up and down plunge of the Holloway – Lightning and Blacktop zones; and,

- Between the Lightning and Blacktop zones at the Holloway Mine where limited drilling has returned significant gold values from underground drilling.

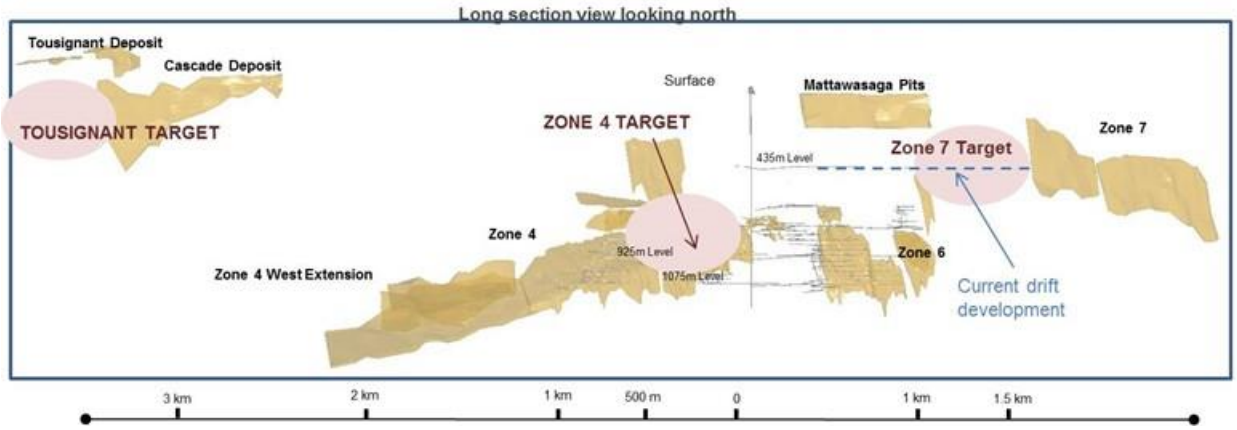

Figure 8-1: Vertical longitudinal section of Holt near mine targets

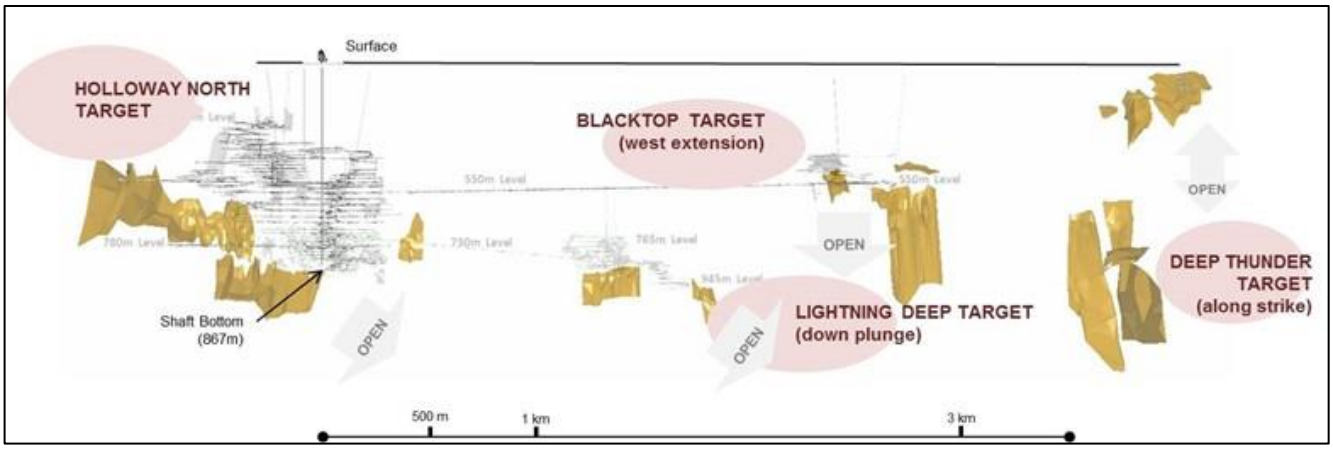

Figure 8-2: Vertical longitudinal section of Holloway near mine targets.

8.2 Within and Immediately Adjacent to Previously Discovered Areas

8.2.1 Lightval

In the period 1986-1989, Newmont Mines Limited (Canada) conducted a significant exploration program that included line cutting, geological mapping, lithogeochemical sampling of all rock outcrops, outcrop stripping, channel sampling of stripped areas,

ground magnetic surveying, IP and limited HLEM surveying. Diamond drilling of 37 holes totalling 11,316 m was completed. Significant intersections include 2.85 g/t Au. over 9.95 m from hole LV88-8B (green carbonate altered ultramafic) and 1.42 g/t Au. over 14.0 m from hole LV87-2 (altered zone at sediment/porphyry contact). Noranda optioned the ground during 1989-1992 and completed 5.5 line kilometres of IP surveying on five lines on the northern half of the property. Drilling over a three-year period amounted to 30 holes completed for a total of 8,621 m. Significant intersections from this program include 29.85 g/t Au over 1.5 m from hole LV89-51 (sediment/ultramafic contact) and 3.64 g/t Au. over 2.0 m (Lightning Zone style mineralization, mafic/ultramafic contact).

During October 2001, Newmont carried out a diamond drilling program comprised of two holes totalling 475 m on the southern portion of the Lightval property. The program was designed to test geological targets with coincident IP chargeability anomalies and, in the case of hole LV01-68, anomalous Au in humus geochemistry. Previous IP surveying (1986) on the Lightval Property, by Newmont Mines Limited (Canada), had outlined a number of untested IP trends in favourable geological settings. No economic gold values were returned from the drilling, although both holes intersected weak to moderately altered zones with low gold values. The highest value obtained was 0.51 g/t Au over 1.0 m from a calcite and hematite altered mafic volcanic from drill hole LV01-69. A moderate to strongly altered section over 13.8 m of silica and lesser albite and ankerite alteration in hole LV01-68, returned only weakly anomalous values of 0.17 g/t Au over 1.0 m. Following this program, two areas of interest were recommended for follow-up, namely the Lightning Zone volcanics package in the northern half of the property and the silica/albite altered interval in LV01-68 in the southern half of the property. The Lightning Zone stratigraphy has not been fully tested at depths below 200 m from surface due to gaps in the potentially more prospective areas of up to 800 m between drill holes. Only one hole tests the 1.8 km long package at a depth of 500 m below surface, which is a favourable zone for flat fault-hosted gold mineralization in the Holloway Mine. The silica/albite altered interval intersected in LV01-68 remains open ended, having possibly been intersected in one historic hole to the west. The zone has been traced for a distance of 300 m in outcrops and pits before disappearing under overburden. More drilling is required here, particularly to investigate the potential of the footwall stratigraphy to the north of the equivalent Lightning volcanic package.

8.2.2 Harker Newmex / TBone

This target area is located in Harker Township and is readily accessible from Highway 101 East and Highway 672. KLG conducted diamond drilling at Harker West in 2014 intersecting mineralization associated with the PDF.

Historically, reconnaissance level drilling in the T-Bone and Newmex areas focused on testing two elevated gold targets one being the McKenna fault and the other the Imperial

Fault (antiform hinge). The results outlined an area measuring ~500m in strike length with Au values in the 3-8 g/t Au range over 3-16m widths. The Newmex property was logged in 2015, with KLG prospecting and mapping the property.

8.2.3 Deep Thunder / Canamax

Surface drilling at the Deep Thunder Zone in 2011 was successful in expanding the zone of gold mineralization to the east and has confirmed the presence of higher grade gold structures within a broader zone of alteration. Gold mineralization is concentrated within several sub-parallel zones along steeply dipping structures, from true depths of 620 m to 1,100 m, over a strike length of 350 m.

In 2014, KLG conducted an infill drilling program consisting of 10 holes / 2,400m. Historical drill core was located and re-analyzed. 2014 re-assay results correlated very well with the historical assays. KLG also re-established survey control on the property. In 2015, additional drilling is planned to test the “gap” (an area of sparse drill coverage) below the Canamax zone which extends down to the Deep Thunder deposit mineral resource.

8.2.4 Sediment Zone

Deep surface drilling was initiated in late 2012 to test the down-dip component of the Lightning Deep Zone. During this program, drilling intersected a steeply south dipping, silicified, pyritic zone hosted within the sedimentary unit and KLG has named this new zone the Sediment Zone. The first hole of the program (GH12-001) returned assays grading 5.60 g/t Au. over 8.1 m. Follow-up drilling has continued to intercept the newly discovered zone with recent drilling extending the mineralization over a strike length of 750 m with a 250 m vertical height. The new Sediment Zone is situated approximately 250 m in the hanging wall (south) of Lightning Deep. In 2013 KLG targeted the Sediment zone using existing development from the 550 m drift at the Holloway Mine. The underground drilling concluded that the Sediment Zone dips at 45° south and remains open both to the west and to depth. Drill results returned anomalous gold grades associated with this zone, however the zone appears to be too narrow to warrant additional follow-up.

8.3 Generative Targets Compilation and Evaluation

In 2016, KLG employed Geotech to complete an airborne Magnetics/Electromagnetics survey over the Holt-Holloway property (Figure 8-3) as well as several other prospective land claims currently held by KLG. Utilizing this data, the exploration team will generate targets correlating the data with drill holes and other surveys to complete a geological interpretation.

KLG geological personnel are actively working up exploration targets on the Holt and Holloway properties and the potential for a repetition of the mineralized zones and the extension of most zones remains open along strike and or at depth. These extensions are regarded as high potential targets by KLG Exploration personnel. In many instances, underground diamond drill platforms are required to facilitate the orderly exploration of these zones where possible. Surface drilling will also be used to support the mine exploration effort where warranted.

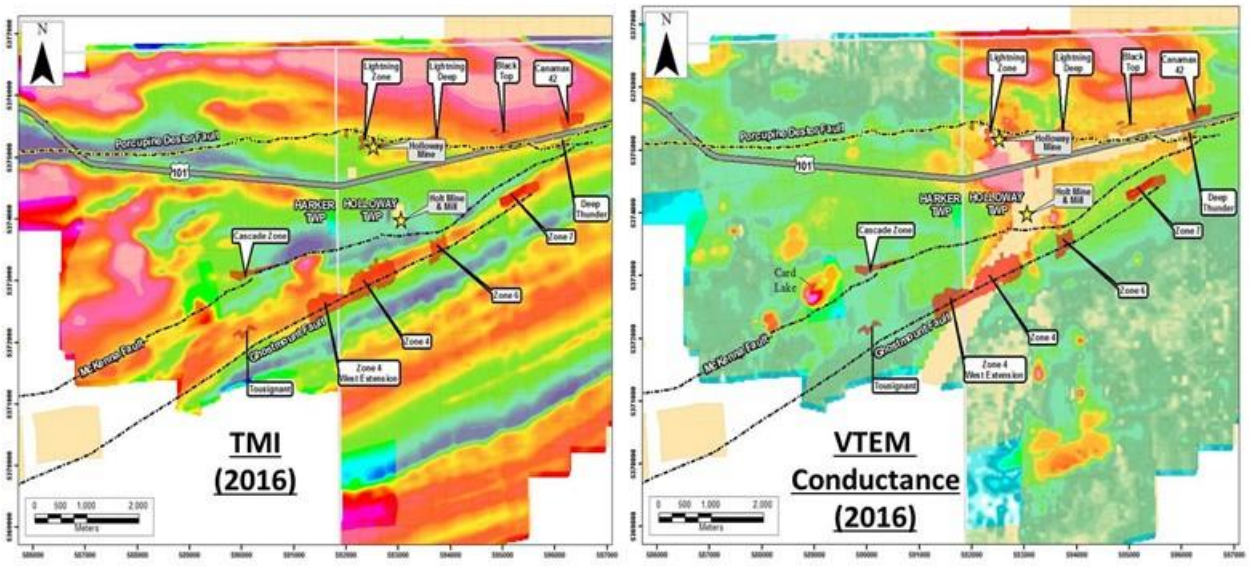

Figure 8-3: 2016 VTEM survey results.

8.4 2016-2017 Exploration Programs

8.4.1 Holt-Holloway Mines

Throughout 2016, exploration in the vicinity of the Holloway-Holt mines continues to be a priority, in order to identify and replenish mineral resources. Recent exploration programs were focused at Holt Deep Zone 4 West Extension, at Lightning Deep, and at Canamax / Deep Thunder.

In 2017, exploration programs will search for mineralization further away (over 3 km away) from the Holloway-Holt operations. Approximately 22.2 km of exploration drilling will focus on evaluating the mineralized limits for the West Tousignant/ Harker West and

on continuing to evaluate the Howey Cochenour – Coin / Phoenix Fault trend on the Holt property. A regional plan showing the target locations of proposed drill programs is found below Figure 8-4.

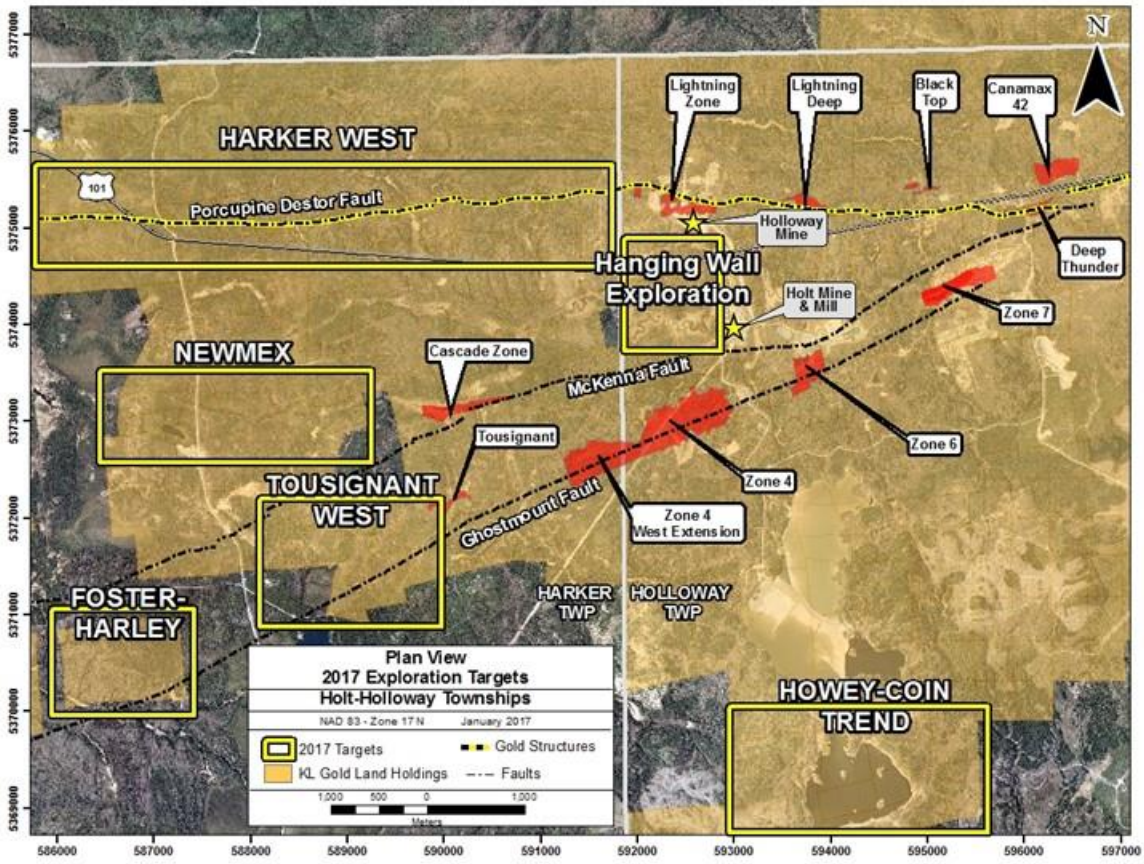

Figure 8-4: Plan view of exploration targets near the Holt Mine Complex.

8.4.2 Tousignant Trend

The Tousignant trend (Figure 8-5) is situated approximately 3 km west of the Holt headframe and contains a wide variety of potentially mineralized targets which warrant drill follow-up in 2017. KLG expects to follow-up on 2015 drill program results where near-surface mineralization was intersected in Holes TZ15-004 and 005 which returned assays of 3.10 g/t Au over 6.1m and 8.50 g/t Au over 4.8m, respectively. This mineralization remains open to the west and is considered to be winter work given the low ground in the area. Follow-up drilling in 2017 will test both the strike potential along the Ghostmount Fault and the potential for repetitive flat lying mineralized extensions as found associated with Zone 4 and Tousignant.

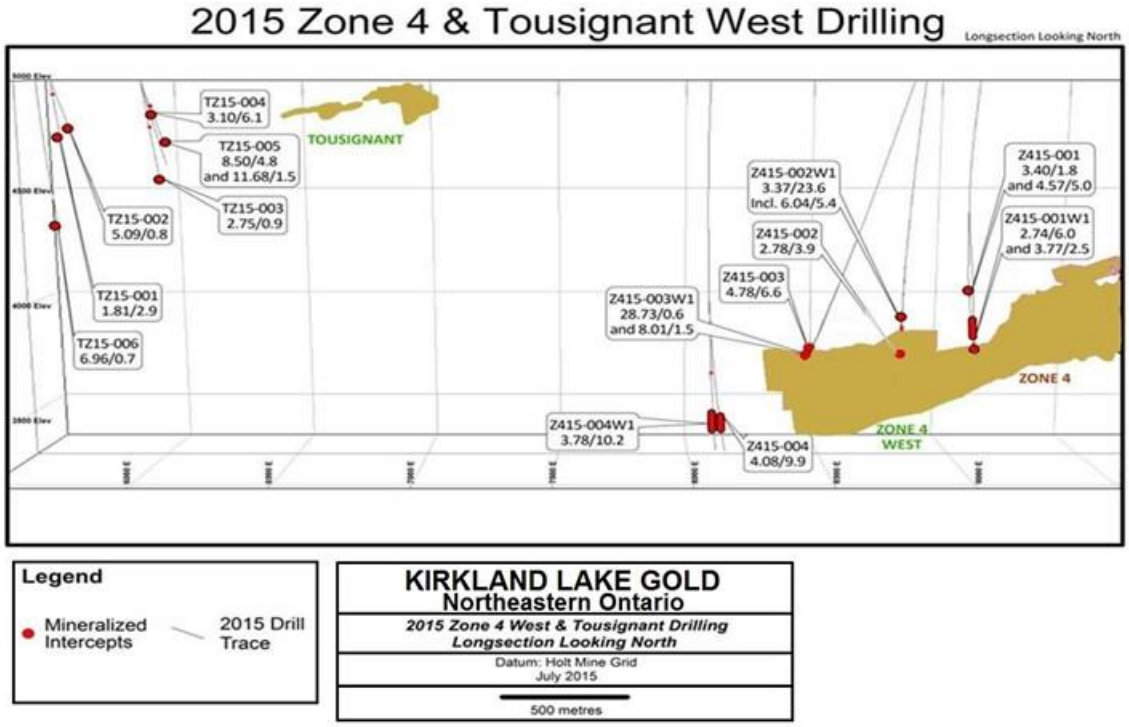

Figure 8-5: Zone 4/Tousignant West longitudinal section showing recent drill results.

8.4.3 Howey Cochenour / Coin Trend

The Howey Cochenour / Coin Trend is situated 3 km south of the Holt headframe in the vicinity of the polishing pond. This is a shear hosted zone, which is associated with the rhyolite / mafic volcanic contact seen in test pits, trenches and scout level drilling conducted by KLG. The mineralized zone has been effectively traced over a 400m strike length and remains open along strike in both directions and could possibly be associated with the Golden Harker property situated 3 km to the west of the present drilling coverage. A small trenching and sampling program and a 7-hole drill program was conducted in 2014, all of which returned anomalous gold values in every hole. The 2017 exploration objective for this zone is to actively explore along strike for mineralization associated with this trend.

8.4.4 Harker Newmex / TBone

Drilling was proposed on these targets (as indicated by the yellow stars in Figure 8-6) in 2016. Additional drilling is planned for 2017.

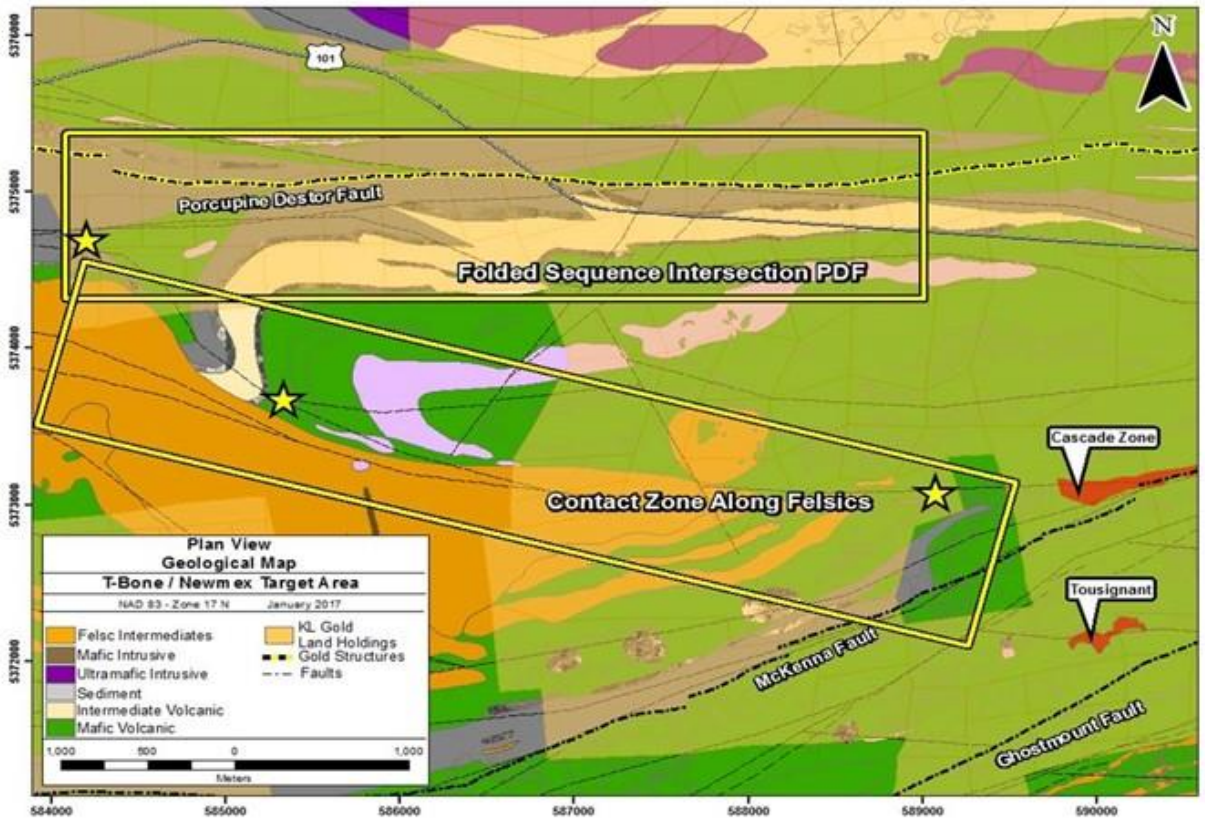

Figure 8-6: Harker West/Newmex target location plan showing prospective target areas.

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 the core shack on the mine property.

From underground, exploration and definition drill core is recovered in BQ size. The core is also boxed by the contractor underground and then hoisted up to surface through the shaft in a bin or pallet, which is placed in front of the core shack.

For 2017, KLG plans to utilize 3 surface drills to explore targets in the Holt-Holloway trends.

Presently, all diamond drill holes are in Holt or Holloway Mine grid for underground and UTM NAD 83 Zone 17 for surface. Drilling from surface is collared using a handheld GPS. KLG has a conversion formula for both mine grids to UTM and vice versa as calculated through control points by Talbot Surveys. Recent collar data for surface holes may also have the respective mine grid associated with the UTM grid.

The strike of the mineralized zones in the region are east-west with a steep moderate dip to the south. Drilling to intersect zones are best completed when drilling from the south to the north from surface. There are instances where cross cutting veins and mineralized zones may be present perpendicular to the mineralized trend.

10.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

10.1 Sampling Methods

Diamond drill core samples, chip samples and muck samples are all used at Holt Mine for grade control. Only the core samples and the chip samples are used for reserve and resource determination.

The treatment of diamond drill core depending on location and purpose can vary in the sampling method. The main methods are surface exploration, underground exploration and underground definition. A standardized protocol for sampling of surface exploration diamond drill core, as well as for underground sampling of chip and muck samples, for gold analyses, is employed by KLG. From the 2010 drill campaign ongoing, this protocol was documented , , 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 is sampled unless 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 7.0m 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. QCs 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, its nature (massive sulphides, chloritic waste rocks).

All drill core sampled from underground definition drilling that falls within stated reserves shapes is bagged whole and typically assayed at KLG's Holt assay lab or sent out to a third party lab (Swastika). Remaining core outside the sample interval is kept in storage racks at Holloway Mine pending review of final gold analyses of sampled material. Once values are received and reviewed by a geologist and no further sampling of an individual drill hole has been determined to be necessary, the remaining drill core is discarded.

For all drill core sampled for definition drilling that falls outside current reserves shapes, the same protocols are applied with the exception that some core is split using a hydraulic splitter, with one half forming the sample and the other half remaining in the core box. This remaining core is stored in racks at the Holloway Mine site, where sample tags remain in the boxes at the appropriate intervals for future review. Determination of what material should be split and stored is performed by a geologist (e.g. the project, senior or chief geologist) in charge of overseeing the drilling program. All drill core obtained from underground exploration drilling is sampled under the same protocol, with the exception that all samples and core are split and stored permanently as described above.

Chip sampling of development faces underground 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.

After a round is blasted underground and also long hole stopes where access to personnel is restricted for safety, the mining or mucking crew will obtain muck samples from the freshly blasted round. KLG practices dictates that 1 random grab sample from the muck be taken for every 20 tonnes of muck. These samples serve to gauge the mill feed and to confirm the chip sample results. Muck sampling of all the workings, development and stopes is now carried out for mining control and reconciliation purposes.

These samples are tagged and placed in appropriately marked sample bags and then hoisted to surface to be tested at the Holt Assay Laboratory. At the lab, they are reduced in size by riffling before being treated by the standard assay procedures.

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 H. Miree, P.Geo. of KLG for underground drill core and T. Gallo of KLG for surface drill core.

A lab comparison check was completed on the samples from the 2016 drilling. Both the rejects (Figure 10-1) and pulps (Figure 10-2) were re-tested at Bureau Veritas with the results summarized below.

Overall, 175 samples were re-tested with 122 samples being rejects and 53 samples being pulps. The majority of the data showed comparable results with a slight positive bias towards results from the original Lab Expert results. These discrepancies could be due to variability in the labs or the inherent variability in the gold sampling.

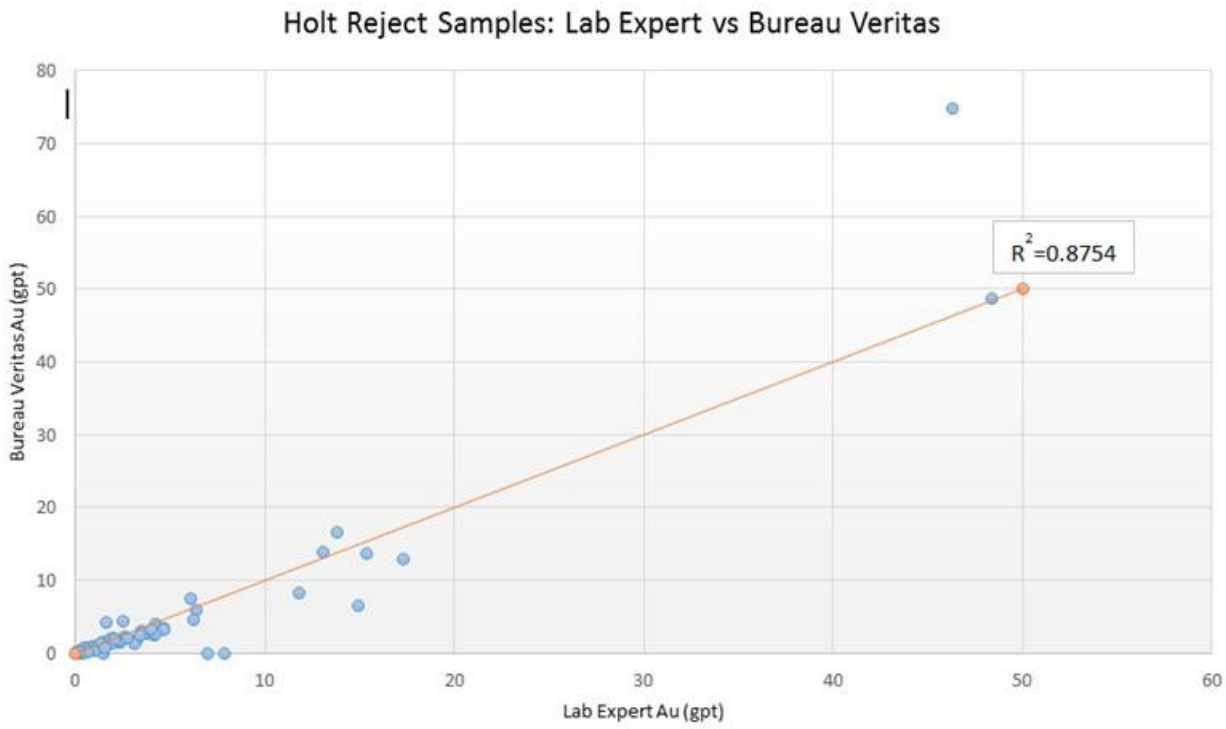

Figure 10-1: Reject samples lab comparison between Lab Expert and Bureau Veritas.

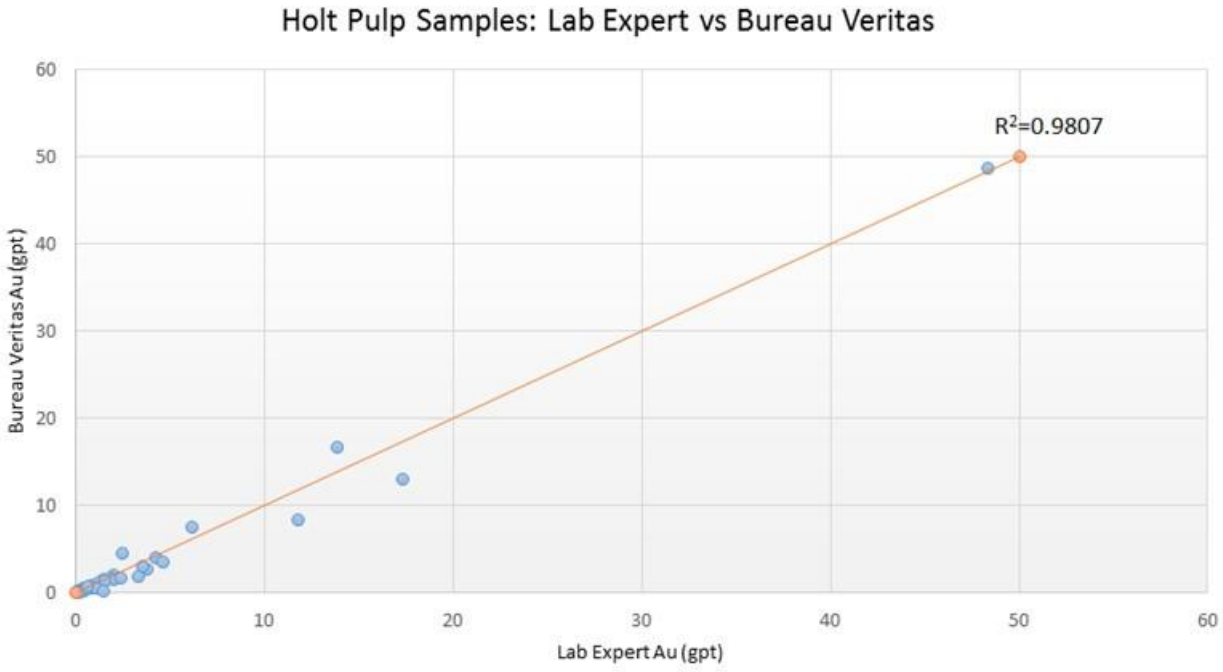

Figure 10-2: Pulp samples lab comparison between Lab Expert and Bureau Veritas.

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. Recommendations from the audit concluded that the Holt Laboratory has tight turnaround time requirements. Based on the available quality control data, the laboratory team produces good quality gold fire assays suitable for most mine applications. The gold is generally described as very fine grained and is associated predominantly with pyrite so that pulps are relatively homogeneous and assays are repeatable.

The mine laboratory receives mostly muck and “stope” samples (some of which are chip samples). These sample types are biased and representative samples are difficult to achieve. Although the data are useful for long-term reconciliation and ore-waste

discrimination, high precision assaying will not make the results more reliable. As a result most mine laboratories, including Holt, focus on providing reasonably accurate results and focus on meeting 8 hour turnaround times.

In contrast, whole core is assayed for underground drill holes and additional quality control is in place. A reference material is included in each fire assay batch and pulps are submitted for check assays. In addition, geologists submitted reference materials with core in 2016.

11.0 DATA VERIFICATION

Historical and more recent drill records have been compiled in a digital database for the project and verified to the maximum extent possible. Diamond drill logs are available in hard copy for historical data. Photos of the drill core are taken in the event that core is not available to be viewed.

In 2015, KLG employed a database manager to verify and compare historical data from hard copies to its digital compilations. Work is ongoing for historical data in the Holt/Holloway database with no major concerns or changes to report at this point.

In the QP's opinion, the data collected and available are adequate for the purposes used in this technical report.

12.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The following sections are copied (and updated) from the previous technical report (Cater and Salehi, 2015). A summary is presented in the following sub-sections. No material changes occurred since the last technical report was filed in 2015.

12.1 Metallurgical Testing

In 2014, a series of 30 kg bulk samples were collected from representative core samples for both the Ghost and Tousignant Zones for use in grinding test studies. SGS Mineral Services was requested to perform metallurgical testing to evaluate St. Andrew Goldfields Ltd.'s Tousignant Lens and Zone 7 ore body samples. From the assaying protocol applied, it was determined that the gold head grades were 3.60 g/t Au for Zone 7 sample GS 11-002, 3.83 g/t Au for Tousignant Lens sample 1 and 5.74 g/t Au for Tousignant Lens sample 2. The samples contained between 1.16% to 1.66% sulphide sulphur and 7.04% to 12.4% carbonate.

The Bond ball mill grindability tests performed were categorized as hard to very hard with Bond ball mill work indices (BWI) ranging from 19.0 kWh/t to 22.7 kWh/t.

For the CIL tests performed on the Zone 7 samples, gold extractions ranged from an average of 87% for samples GZ11-002 and GZ12-014 to 90% for sample GZ12-017B. The final residue gold grades ranged from an average of 0.41 g/t Au for sample GZ12-017B to 0.48 g/t Au and 0.49 g/t Au for samples GZ11-002 and GZ12-014, respectively. For the CIL tests performed on the Tousignant Lens samples, gold extractions ranged from an average of 93% for sample Tousignant Lens 1 to an average of 94% for sample Tousignant Lens2. The final residue gold grades ranged from an average of 0.32 g/t Au for sample Tousignant Lens 2 to an average of 0.39 g/t Au for sample Tousignant Lens 1. These samples were shipped to SGS Mineral Services Lakefield, where the metallurgical test work was completed.

At Canamax, recent infill drill program core was collected and used to conduct bottle roll test work on representative mineralization from the project site. The four bottle roll tests indicated that recovery rates range from 93.8 to 95.4% can be expected on a 6.85 g/t Au grade material.

A summary of test work completed on ore from the various zones is presented in Table 12-1 and summary recent bottle roll test results for Canamax is presented in Table 12-2.

Test	Zone 5	Zone 6	Zone 8	Blacktop Lightning	Blacktop Footwall	Holloway stock pile ore
Standard leach tests at different grinds (48 hours)	3 tests	3 tests	3 tests	5 tests		
Carbon in leach test (different carbon concentrations)				3 tests	3 tests	
Flotation and leach of flotation tail				1 test	1 test	
Ball mill work index				1 test		1 test
Preg-robbing test				1 test	1 test	
Diagnostic test				1 test		
ICP analysis	1	1	1	1	1	
Whole rock assay				1		
Carbon analysis				1	1	

Table 12-1: Recent metallurgical test work on Holloway ore.

Table 12-2: Metallurgical Canamax standard leach test results.

TestID	BottleNumber	SolidsWeight	AssayHeadAv	AssayTailsAv	Calc. Head	Head Abs Difference	Total Recovery
		grams	g/t Au	g/t Au	g/t Au		
2014 11 12 - 0904	B16	299.7	6.875	0.244	4.7268	2.648	93.76%
2014 11 12 - 0903	B15	303.1	6.875	0.245	4.717	2.158	94.33%
2014 11 12 - 0902	B14	302.02	6.875	0.287	5.9993	0.876	94.87%
2014 11 12 - 0901	B13	304.5	6.875	0.247	5.8596	1.015	95.35%

Table 12-2: Metallurgical standard leach test results.

Leach test recoveries varied between 86% and 95% depending on the zone. Blacktop, Lightning and Footwall samples had the lowest recoveries. Results indicated that the Blacktop Footwall ore, which contains preg-robbing graphite, should be treated by a CIL process to attain higher recovery. This is the process used at the Holt Mill. Recent Canamax bottle roll tests returned recovery rates ranging from 93.8% to 95.4%.

Gold in the tails of the Blacktop and Lightning mineralized material is thought to be associated exclusively with sulphides. Finer grinding offers limited recovery increases. Mineralogical studies may help to understand the gold occurrence in these samples. Process alternatives to offset this problem seem limited as oxidation processes are not considered to provide an economic alternative, taking into account the limited gold recovery increase and the proportion of tonnage involved.

All leaching tests were based on 48-hour residence time. At the planned production rate of 1,500 tpd, the residence time in the pre-aeration and leach circuit would be 48 hours. A kinetic leaching test, by type of ore, versus a residence time relationship should be considered as a method to determine if recoveries could be improved.

The results obtained are based on lab scale tests on small samples from a limited quantity of mineralized material.

12.2 Mineral Processing

There has been production from the Holt and Holloway mines which provides records of metallurgical performance (Table 5-6). The ores from the two mines were blended and processed with other ore in the past.

12.2.1 Holloway Mine Ore

Process plant statistics from 2009 to 2012 are presented in Table 12-3. Metallurgical recoveries varied from 86.9% in 2009 to 90.2% in 2012.

		2009	2010	2011	2012	Total
Tonnes milled	(t)	101,941	340,594	204,258	191,471	838,264
Grade	(g/t)	6.57	6.04	3.84	3.90	5.08
Contained ounces	ozs	21,529	66,122	25,199	23,990	136,840
Recovery rate	%	86.9%	86.9%	85.2%	90.2%	87.2%
Recovered ounces	ozs	18,712	57,459	21,461	21,629	119,262

Table 12-3: Mineral processing statistics for the Holloway ore (since 2009).

12.2.2 Holt Mine Ore

Process plant statistics since re-starting the operation in 2010 are presented in Table 12-4. Metallurgical recoveries varied from 92.5% in 2010 to 94.4% in 2016.

Table 12-4: Mineral processing statistics for the Holt ore (2010 - 2014).

Holt Mine		2010	2011	2012	2013	2014	Total
Tonnes milled	(t)	23,257	232,330	316,487	369,657	442,108	1,383,839
Grade	(g/t)	2.70	4.33	4.96	4.96	4.41	4.64
Contained ounces	oz	2,185	34,611	53,444	62,014	66,097	218,352
Recovery rate	%	92.52%	93.54%	94.39%	95.00%	94.80%	94.51%
Recovered ounces	oz.	2,022	32,376	50,444	58,898	62,633	206,373

		2009	2010	2011	2012	Total
Tonnes milled	(t)	0	23,257	232,330	316,487	572,074
Grade	(g/t)	0	2.92	4.63	5.25	4.91
Contained ounces	ozs	0	2,185	34,611	53,444	90,241
Recovery rate	%	0%	92.5%	93.5%	94.4%	94.0%
Recovered ounces	ozs	0	2,022	32,376	50,444	84,842

Table 12-4: Mineral processing statistics for the Holt ore (since 2010).

13.0 MINERAL RESOURCE ESTIMATES

The Mineral Resources effective as of December 31, 2016 are summarized in Table 13-1.

	Measured			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)	Tonnes (kt)	Grade (g/t)	Cont. Gold (koz)
Holt	3,960	4.32	549	3,020	4.10	398	6,970	4.22	947	8,690	4.74	1,320
Holloway	156	4.11	21	1,210	5.39	210	1,370	5.25	231	2,710	5.23	456
Total	**4,110**	**4.31**	**570**	**4,230**	**4.47**	**608**	**8,340**	**4.39**	**1,180**	**11,410**	**4.86**	**1,780**

Notes
CIM definitions (2014) were followed in the estimation 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 2.9 g/t for Holt and 3.9 g/t for Holloway
Mineral Resources are estimated using a 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 Holt and Holloway properties (as of Dec 31, 2016).

13.1 Database

The current drillhole database for the Holt and Holloway mines consists of 15,611 drill holes from surface and underground. The majority of underground drilling was done with BQ diameter core, the surface drilling was a mix of BQ and NQ diameter. The drill hole database used for all resource estimates updated by the current report was complete as of December 31, 2016. The database used in the mineral resource estimates consisted only of diamond drill hole data; no underground chip samples were used.

The Holt and Holloway mines have a history of production and good reconciliation between the mill and block model grades. This indicates that the majority of the drillhole database is reliable and can be used with confidence. Spot checks were conducted on the original assays against the Datamine drill hole database for 20 holes, randomly selected from 2011-2012 drilling.

Three surface diamond drillholes were removed from the database because the locations of the collars or the downhole deviation are known to be incorrect. The holes removed from the database were: F-02-3w, W-02-2 and W-97-1.

13.2 Geological Interpretation and 3D Solid Modelling

Geologic interpretation and 3D modelling was completed by the Senior Geologists for the respective mines. The main criteria for inclusion within a mineralized zone were: lithology, alteration, major structures and gold grade. The cut-off grade used for 3D modelling was 1.0 g/t, with exceptions allowed to follow alteration, lithology or structural contacts. All 3D modelling of low grade mineralized envelopes was done using the Datamine Studio3 software. The shapes were verified by the Chief Mine Geologist and by the Resource Geologist.

3D models of underground lateral development and stoping were verified and imported into Datamine from AutoCAD by the Mine Engineering Department personnel.

13.3 Density Data

The density used for mineral resource estimation is 2.84 t/m^3, which essentially corresponds to historical density determinations at both the Holloway and Holt deposits. These density determinations seem appropriate for a sulphide replacement style of deposit within a sequence of mafic volcanic – ultramafic rocks. No correlation exists between gold grade and density and, therefore, a bulk density by rock type was considered appropriate for this deposit.

During the SAS drilling campaign between 2006 and 2008, in excess of 1,030 samples from the mineralized zones were sent to Laboratoire Expert for specific gravity determination (i.e. sample dried and weighed (D) and then immersed in water and weighed (W), SG=D/(D-W)). The average density determination by the lab was 2.81 t/m^3, a difference of approximately 1% compared with historical results. The recent work is not considered sufficient to modify the density estimate for the current resource estimation.

13.4 Assay Composites

Samples used in the resource calculation process at the Holt and Holloway mines consisted of drill core samples only. Chip samples were not used in the grade estimation procedure. Typical underground drill core is BQ (37 mm) in size.

Samples were taken at the discretion of the geologist. They were identified with a sample number, securely sealed and transported to the assay lab located at the Holt mine site. Core samples from the surface drill program were typically NQ caliber (48mm) in size, were sawed in half and shipped to Lab Expert for gold analysis, located in Rouyn-Noranda, (QC).

Quality control (QC) samples consisting of both certified reference standards and blanks were inserted into the sample stream for exploration samples only. The labs also use internal calibration standards to act as a QC check; these were considered sufficient QC for definition drilling.

Assay results were returned to the geologist by the lab in excel format and the results were uploaded into the drillhole / mine sample database.

Composite lengths for drillhole data were determined on a zone by zone basis by creating histograms of sample length through each mineralized zone. In most cases, the sample lengths were clustered around 1.0 m, with a maximum sample length of 1.5 m (consistent with KG Standard Operating Procedure for core sampling). Samples were composited to 1.5 m in all cases. Orphan samples (residual composites at the edge of the zone) were distributed evenly with the other composites of each drillhole, maintaining a composite length as close to 1.5 m as possible. This method prevents any data from being discarded at the margins of the mineralized envelope.

No correlation between density and grade has been identified, so only sample length was used to weight the grades during compositing. Missing or unsampled areas were assumed to have trace gold grade and were assigned a grade of 0.0025 g/t Au.

13.5 Assay Statistics

Statistical analysis was conducted on the assay populations of each zone, or grouped zones, where possible. Histograms and probability plots of gold grade were created (Figure 13-1 and Figure 13-2). Gold grade capping of 25 g/t has been used in historical estimates for the Holt and Holloway mines and has been shown to reconcile well on a stope-by-stope basis. Probability plots indicate that 25 g/t is a suitable capping value based upon inflection points in the sample population in the area of the 95th to 99th percentile; it has been used in the majority of the grade estimates in this report. The zone V-93 was not capped as there were no anomalously high grade samples and a relatively small dataset. The Tousignant Zone was capped at 20 g/t, but there were no anomalously high gold grades and capping probably wasn't necessary. Capping was applied prior to compositing. The number of samples capped was less than 1% for each zone, with the exception of C-104, where two lenses were between 1% and 2%. Resource estimates were insensitive to capping values, due to the low numbers of capped samples and the absence of anomalously high gold grades. The difference in total tonnes and grade for Zone 4 "upper" (inclusive of reserves), with capping of 25g/t and un-capped is shown in Table 13-2: it demonstrates that the effect of high grade gold assay capping on the mineral resource estimation process at the Holt and Holloway mines is minimal. This is attributed to the fact that most assay results for the zones were

less than 25 g/t Au and from the lack of high grade “nugget” outliers. Gold grade distribution behaves quite well.

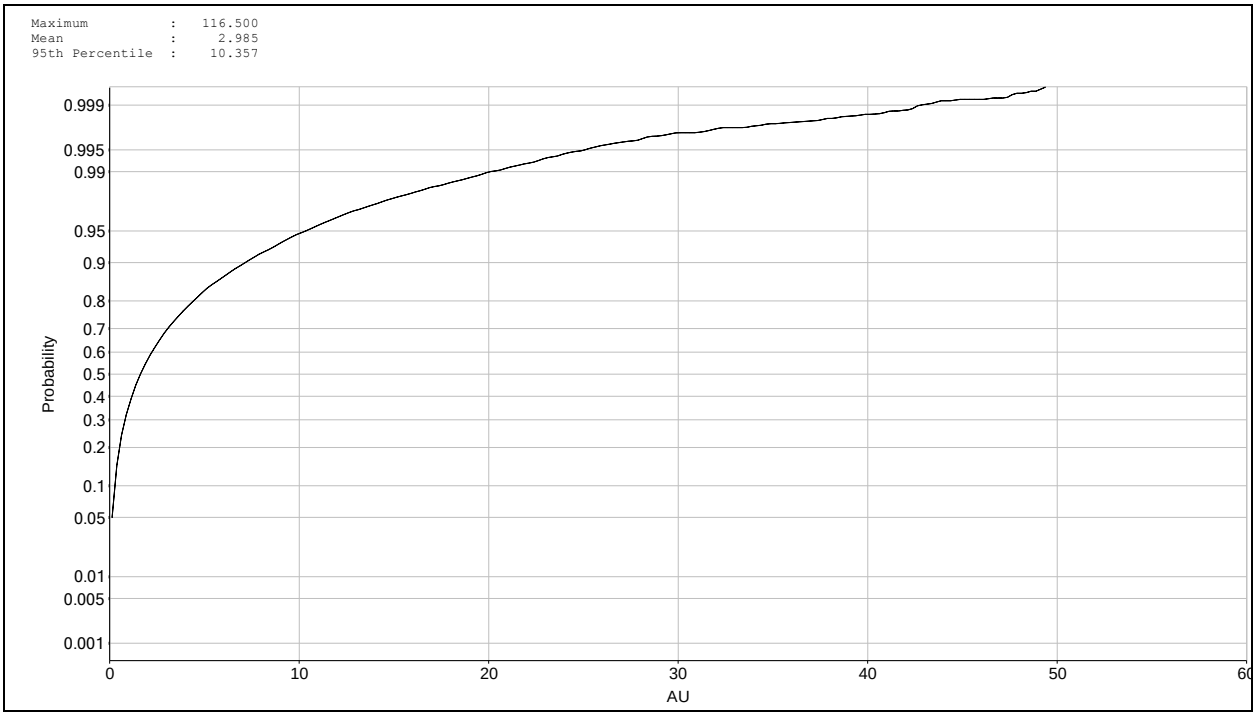

Figure 13-1: Au probability plots for Zone 4 (upper and east).

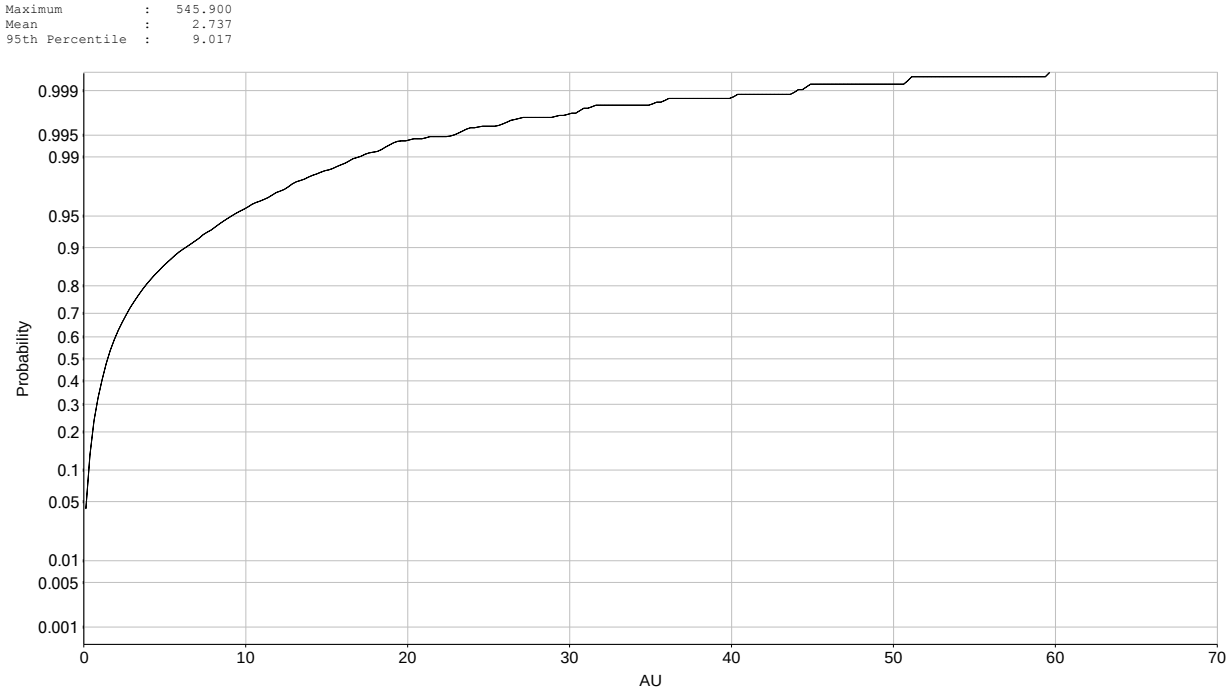

Figure 13-2: Au probability plots for Zone 4 (lower), C-95, C97 and C-99.

Cut-off (g/t)	Capped at 25 g/t			Uncapped		
	Tonnes	Grade (g/t)	Ounces	Tonnes	Grade (g/t)	Ounces
2.50	3,971,868	4.54	580,467	3,978,956	4.67	597,896

Table 13-2: Capped and uncapped models for Zone 4 "upper" and "east".

13.6 Semi-Variograms

Semi-variograms were created for each zone or grouped zone using capped composite values (Figure 13-3 and Figure 13-4). Model semi-variogram parameters (nugget and sill variance, range and orientation) are summarized for each zone in Table 13-3. Anisotropic semi-variograms were created for the majority of zones. Where reliable anisotropic semi-variogram directions could not be determined, omni-directional semi-variograms were created to determine effective ranges for grade interpolation. Omni-directional semi-variograms were also used as a guideline for effective distances to categorize mineral resources as measured, indicated or inferred. In some cases the "vertical" axis of the anisotropic semi-variogram could not be modelled accurately, likely

due to irregular orientations of underground drilling (e.g. Holt “Vertical Zones”, which include: Zone 4 “lower”, C-95, C-97 and C-99). In those cases the model semi-variogram vertical component was estimated as a reasonable best-fit.

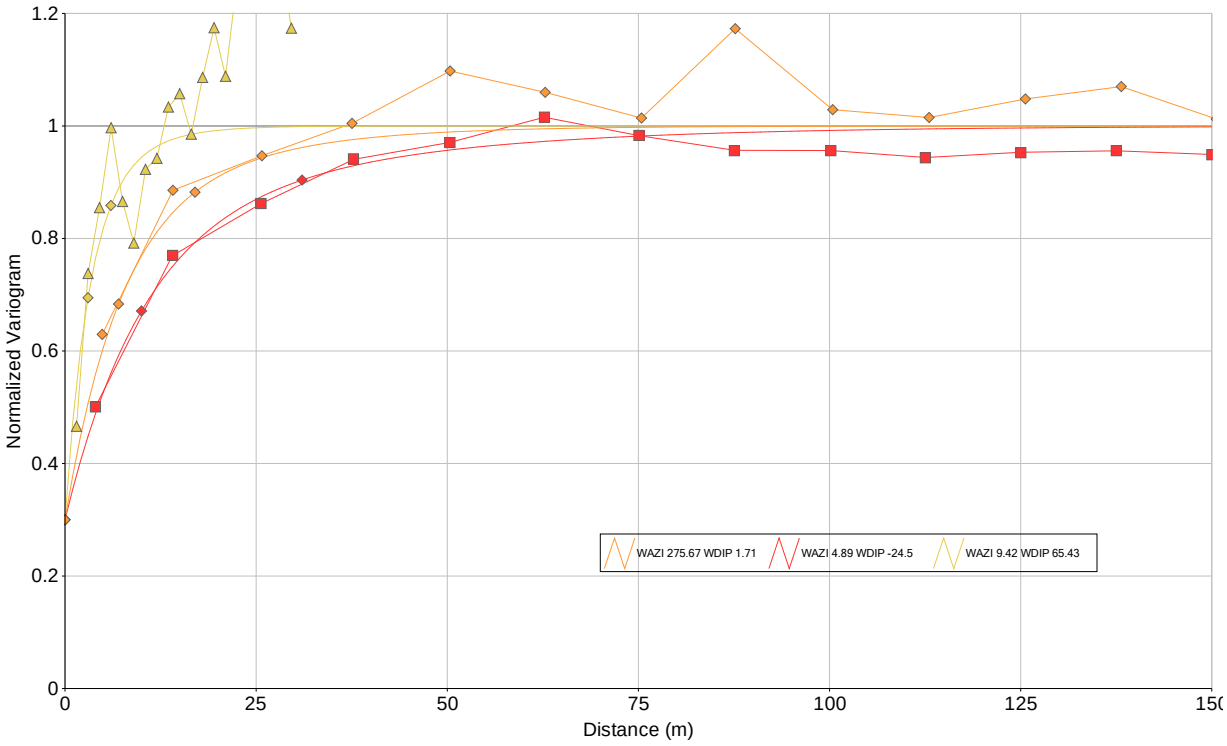

Figure 13-3: Anisotropic semi-variogram for Zone 4 (upper and east).

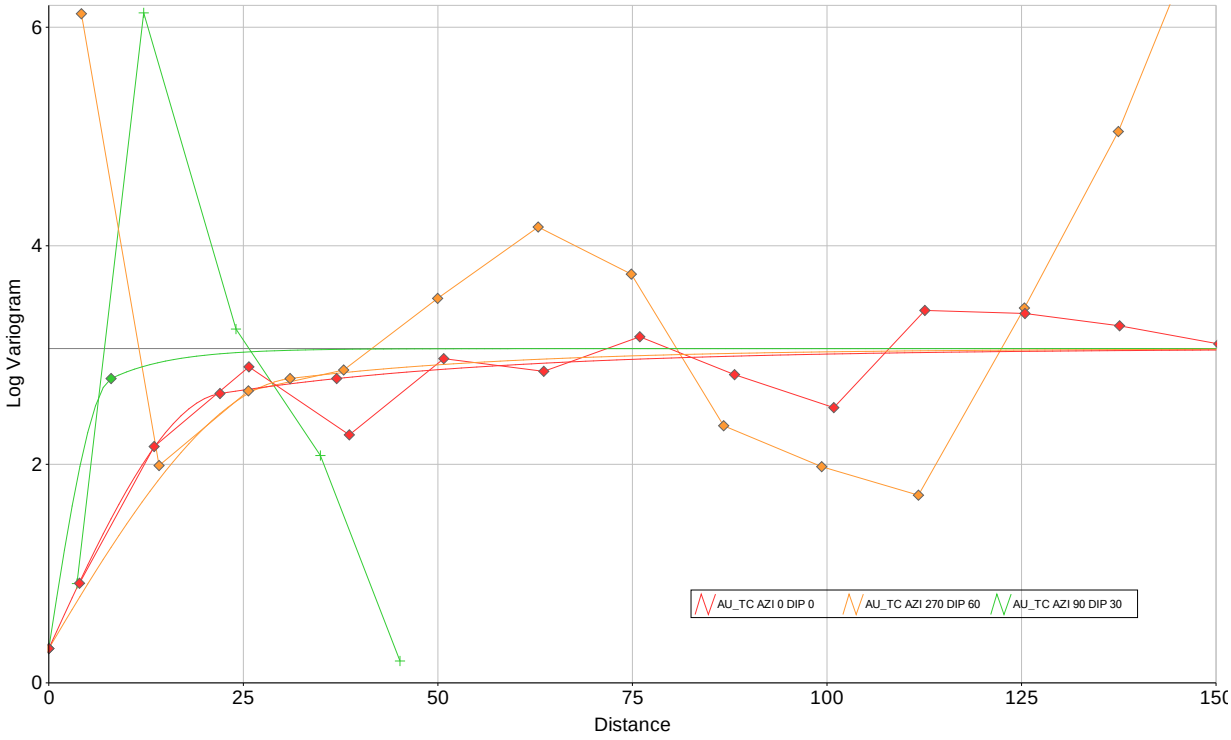

Figure 13-4: Anisotropic semi-variogram for Zone 4 (lower), C-95, C-97 and C-99.

Zone	Sill Variance or (Log Variance)	Nugget Variance	Structure(s)	Spatial Variance	Range & Anisotropy Angles (Dip Dir'n / Dip)			Rotation Angles		
					Axis 1	Axis 2	Axis 3	Z	Y	X
Lower Middle Zone	6.563	1.883	Exponential	3.505	6	6	6	Omnidirectional		
			Exponential	1.175	76	76	76			
Upper Middle Zone	8.723	2.407	Spherical	2.804	10	10	10	Omnidirectional		
			Spherical	3.512	38	38	38			
Zone 4 upper and Zone 4 East	9.954	2.986			4.89/-24.5	275.67/1.71	9.42/65.43			
			Exponential	4.977	7	10	3	185.67	-1.71	204.51
			Exponential	1.991	17	31	6			
Zone 4 lower, C-95, C-97, C-99	3.059	0.314			153.26/58.53	260/10	355.73/29.5			
			Spherical	2	22	31	8	170	-10	60
			Exponential	0.745	37	31	8			
C-104 Lens 4	10.453	4.454			180/60	90/0	0/30			
			Spherical	4.3	11	12	7	0	0	120
			Spherical	1.699	11	22	7			
Smoke Zone	3.389	0.8	Spherical	2.214	12	12	12	Omnidirectional		
			Exponential	0.375	84	84	84			
Ghost Zone Lens 1	6.446	1.457	Spherical	0.084	7	7	7	Omnidirectional		
			Exponential	4.905	7	7	7			
Tousignant Lens 1	15.575	4.641	Spherical	5.654	6	6	6	Omnidirectional		
			Spherical	5.28	35	35	35			
Tousignant Lens 2	1.529	0.49	Exponential	1.039	20	20	20	Omnidirectional		

Table 13-3: Semi-variogram model parameters.

13.7 Block Model

Three-dimensional block models were calculated using Datamine software for each zone to interpolate gold grade between drillholes. The block models were created by filling the mineralization envelopes for each zone with cells of a predefined size; the cells were oriented to follow the strike and dip of the zone. Cell size, orientation and number of sub-cells for each modelled zone are displayed in Table 13-4.

For all zones the block size was chosen to correspond to approximately ¼ of the average drillhole spacing, with the exception of the Tousignant and Middle zones. For Tousignant, a number of spatial irregularities were observed with larger block sizes, so a smaller size was used. It is recommended that some definition drilling be completed there, to minimize the adverse effects of using a small block size with relatively wide drill spacing (approximately 25 m by 25 m), such as over-smoothing of data, particularly at the limits of the search ellipsoid radius from a composite. The Middle Zone lenses were irregularly shaped and a smaller block size allowed the cells to fit better within the mineralized lenses.

Property	Zone	Block Size (m)			Block Rotation (°)			Subcells		
		X	Y	Z	Z	Y	X	X	Y	Z
Holt	Zone 4, Zone 4 East, C-95, C-97, C-99	3.0	3.0	3.0	-12.9	19.3	-22.5	6	6	6
	C-104	3.0	3.0	3.0	-2.0	0.0	22.0	6	6	6
	V-93	4.0	4.0	3.0	-8.5	0.0	18.0	8	8	6
	Tousignant Zone, Lens 1	1.0	1.0	0.5	103.4	-14.9	-6.2	2	2	2
	Tousignant Zone, Lens 2	1.0	1.0	0.5	-2.0	13.0	-14.0	2	2	2
	Tousignant Zone, Vertical Lens	1.0	0.5	1.0	-14.5	3.2	20.3	2	2	2
Holloway	Smoke Zone (Main upper, Main lower, Main east, East)	3.0	3.0	3.0	14.0	0.0	0.0	6	6	6
	LMZ, Lens 1	1.0	1.0	0.5	-15.0	-24.0	37.0	2	2	2
	LMZ, Lens 2	1.0	1.0	0.5	19.0	-20.0	33.0	2	2	2
	LMZ, Lens 3	1.0	0.5	1.0	-0.6	0.0	19.3	2	2	2
	LMZ, Lens 4	1.0	0.5	1.0	-8.0	-6.0	40.0	2	2	2
	LMZ, Lenses 5-1 & 5-2	1.0	1.0	1.0	-0.6	0.0	19.3	2	2	2
	LMZ, Lens 6	1.0	1.0	1.0	-0.6	0.0	19.3	2	2	2
	LMZ, Lens 7	1.0	1.0	0.5	-8.0	-6.0	40.0	2	2	2
	LMZ, Lens 8	1.0	0.5	1.0	4.0	0.0	28.0	2	2	2
	UMZ, Lens 1	1.0	1.0	1.0	6.0	-45.0	32.0	2	2	2
	UMZ, Lens 2	1.0	1.0	1.0	-	-	-	2	2	2
	UMZ, Lens 3	1.0	1.0	1.0	10.0	34.0	-8.0	2	2	2
	UMZ, Lens 4	1.0	1.0	1.0	5.0	30.0	11.0	4	4	4
	KZ, Lenses 1 & 2	1.0	1.0	1.0	5.0	30.0	11.0	4	4	4
	Ghost Zone, Lens 1	8.0	2.0	8.0	-13.0	0.0	19.0	4	4	4

Table 13-4: Block model set-up parameters.

13.8 Grade Interpolation

Gold grades were interpolated into the block model using ordinary kriging (OK) whenever reliable anisotropic semi-variogram models could be fit to the data. For folded or irregularly shaped zones, or where the sample dataset lacked sufficient data, inverse distance squared (ID^2) was used. The parameters used in the grade estimation calculation are displayed in Table 13-5.

To facilitate the resource estimation process, a number of zones with similar orientations were grouped together for geostatistical analysis and block modeling. Zone 4 (Holt Mine) was grouped with Zone 4 East, which is an extension of the zone to the east. Zone 4 itself was split into two domains with different orientations:

- Zone 4 “upper” lies on a moderately dipping cross fault; this domain was grouped with Zone 4 East.

- Zone 4 “lower” is sub-vertical and follows the Ghostmount fault. Zone 4 “lower” was grouped with C-95, C-97 and C-99 for modelling, as they are adjacent zones following the same structure.

The Lightning Deep Zone (Holloway Mine) consists of 4 lenses along a sub-vertical structure. These lenses were also grouped and modelled together.

The search ellipsoid orientations were determined by the orientations of the anisotropic semi-variograms for each zone. In the majority of cases, where no reliable anisotropic semi-variogram was found, the search ellipsoid was visually oriented parallel to the strike and dip of the zone. In some cases (e.g. Lightning Deep Zone), the zone was folded. In those cases the search ellipsoid orientation was dynamic, following the orientation of the wireframe. The dynamic orientation was defined by digitizing two sets of strings on closely spaced sections that followed the strike and the dip of the mineralized lens. The Studio3 software uses these strings to create a “net” of points, each with dip and dip direction attributes. During grade estimation, the closest points are used to define the orientation of the search ellipsoid.

For most of the zones modelled, three estimation passes were completed for each cell estimated. The first pass was more restrictive, designed to populate only cells where there was a high confidence in the grade estimate. This pass was designed to populate the measured or indicated categories, depending on the zone being modelled. At least two drillholes were required to populate the first search volume. Smoothing was minimized close to sampled locations (drillhole intersections) by reducing the maximum number of composites that were considered for each estimated cell. The second pass was less restrictive but cells were also populated by at least two drillholes. This pass

increased the smoothing of the model by allowing a larger number of composites to be considered in the grade estimation. When used, the third pass was designed to interpolate grades for outlying areas of the mineralization envelope, and typically only required one drillhole to populate cells with grades. Cells populated by the third search volume were restricted to the inferred category.

Zones with a high drillhole density used composites from at least two octants of the search ellipsoid to populate cells for all estimation passes. This method helps reduce the effects of oversampling in certain directions, particularly for zones where ID^2 was used.

Zone	Interp. Method	Ellipsoid Rotation (°) Z	Y	X	Ellipsoid Radii (m) X	Y	Z	# of Comps. Min	Max	2nd SV Multiplier	# of Comps. Min	Max	3rd SV Multiplier	# of Comps. Min	Max	Max. Comps.	Octants
Zone 4 "upper," Zone 4 East	OK	186.7	-1.7	204.5	7	10	3	5	12	2.5	3	12	5	2	16	2	Yes
Zone 4 "lower," C-95, C-97, C-99	OK	170	-10	60	15	21	5	5	12	2	4	20	3	2	16	2	Yes
V-93	ID^2	-8.5	18	10	30	6	20	3	12	2	3	16	3	2	16	2	No
C-104	ID^2		Dynamic Anisotropy		7	11	4	4	8	2	3	10	3	2	16	2	Yes
Tous. Lens 1	ID^2	65	-13	-15	30	50	10	3	12	2	4	20	-	-	-	2	No
Tous. Lens 2	ID^2	-2	13	-14	30	30	10	3	10	2	4	20	-	-	-	2	No
Smoke Deep	ID^2		Dynamic Anisotropy		12	12	6	4	8	2	3	12	4	4	20	3	Yes
Ghost Lens 1	ID^2	80	-70	25	50	70	10	3	12	2	4	20	-	-	-	2	No
LMZ, all lenses	ID^2		Dynamic Anisotropy		15	15	10	3	10	2	4	20	-	-	-	2	No
UMZ, Lens 1	ID^2	-10	-50	15	10	20	5	3	12	2	4	20	-	-	-	2	No
UMZ, Lens 2	ID^2	80	0	30	10	20	5	3	12	2	4	20	-	-	-	2	No
UMZ, Lens 3	ID^2	110	0	45	10	20	10	3	12	2	4	20	-	-	-	2	No
UMZ, Lens 4	ID^2		Dynamic Anisotropy		15	15	5	3	10	2	4	20	-	-	-	2	No
KZ, all lenses	ID^2		Dynamic Anisotropy		15	15	10	3	10	2	4	20	-	-	-	2	No

Table 13-5: Parameters for grade interpolation for all zones.

13.9 Model Checks

A number of checks were performed to verify that each model was producing a reliable estimate. Visual inspection of each block model in cross-section and in 3D helped to ensure that block model grades agreed with composite grades, and that the continuity of the model was consistent with the drill hole data. Visual inspection also verified that the parameters used in the model were reasonable, such as search ellipsoid orientation and constraining parameters.

For the larger zones (e.g. Zone 4) a number of additional checks were performed. The drill hole data was de-clustered to remove the effects of preferential sampling in high-grade areas and the mean grade of the model was compared to the mean grade from the drill holes. Agreement was good in all cases. Q-Q plots comparing gold grades from ID^2 and OK models showed a bias of higher grades towards the ID^2 models, which is expected due to the "bulls-eye" effect inherent in most ID^2 models. Whenever reliable

OK models were calculated, they were used over ID^2 models. SWATH plots were also created, which compare the spatial distribution of different models by calculating the mean grade for each “row” or “column” of cells in the model. In this case, ID^2 and OK models were compared: spatial agreement was good between the two models for all zones compared; the grades were typically higher for the ID^2 models, but the OK models were less erratic, indicating better averaging.

13.10 Resource Estimate and Classification

Resource classification was based upon both drill hole density (spacing between drill holes) and gold grade continuity. Cut-offs between the Measured, Indicated and Inferred categories were determined for each zone. The block model for each zone was viewed perpendicular to the zone, with the cells coloured by search volume. A closed string was created enclosing search volumes 1 and 2. The model was then re-coloured to show grade and the string was adjusted to enclose only areas within search volumes 1 and 2 where grade continuity was good. The string was used to “cut” an Indicated resource shape out of the low-grade mineralization envelope. The remainder of the low-grade envelope was categorized as Inferred. The Measured category was defined by “cutting” a shape from within the Inferred resource, where confidence in the grade continuity was highest. The area of the Measured category varied from zone to zone, based on past mining activity and reconciliation between the block models and mill. For example, in Zone 4 at the Holt Mine there is an established history of good reconciliation, so the majority of the Indicated shape was upgraded to Measured resources. In the Lightning Deep Zone at Holloway, resources were only classified as Measured if there was development above and below the region being classified.

The Measured and Indicated shapes for each zone were used to create mining shapes. Underground development and the shapes that were added to mineral reserves were removed from the resource by assigning “absent” grade to the resource model where it is intersected by those shapes, then copying only grades above 0 g/t into a new model. Remnant and unrecoverable pillars (as identified by the Mine Engineering group) were removed from the mineral resource using a similar technique. Mineral resources are reported exclusive of mineral reserves for each zone in Table 13-1.

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.

	PROVEN			PROBABLE			PROVEN AND PROBABLE		
	Tonnes (kt)	Grade (g/t)	Ounces (koz)	Tonnes (kt)	Grade (g/t)	Ounces (koz)	Tonnes (kt)	Grade (g/t)	Ounces (koz)
HOLT	1,450	4.2	194	2,500	4.7	376	3,950	4.5	570
HOLLOWAY	0	0.0	0	57	5.7	10	57	5.7	10
Total	**1,450**	**4.20**	**194**	**2,560**	**4.7**	**387**	**4,001**	**4.5**	**581**

Notes
CIM definitions (2014) were followed in the estimation of Mineral Reserves.
Cut-off grades were calculated for each stope
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 for the Holt and Holloway properties (as of Dec 31, 2016).

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.

15.0 MINING METHODS

15.1 Holt

15.1.1 Design Criteria

Mining activities at the Holt mine occur in multiple zones concentrated in two regions within the mine. The western region of the mine contains Zone 4 (Upper and Lower), Zone 4 East, V-93 and West McKenna. The eastern region contains Zone 6 (Upper and Lower), Zone 7, U-100 and the remnant pillars of the C-104 Zone (Figure 15-1). All of the planned zones are accessed from existing rail haulage development headings; therefore, the equipment used in each zone remains captive. The Tousignant Zone will be mined as an autonomous zone from surface via a decline access.

The main accesses for all zones are concentrated on four active rail haulage levels: 435, 775, 925 and 1075. Ore is transported on these haulage levels to the shaft ore pass system. Ramp access is available between 1075 and 775 haulage levels. Zone 6 and C-104 have limited access between mining fronts. Zone 4 is accessed from both 925 and 1075 rail haulage levels, with an internal ramp system connecting the upper and lower portions of the zone.

Zone 4

Zone 4 represents the bulk of the mining since resuming operations at the Holt mine in 2010. This zone presents several design challenges due to its geometry: the zone dips at 30° to the horizontal and plunges from the east to the west at approximately 10°. The plunge, in particular, makes the installation of service raises and holes challenging. Ore passes in the zone consist of a series of conventional raises dipping at 49° that feed chutes on the 925 and 1075 haulage levels. The mining method in Zone 4 is open stoping with delayed backfill.

Backfill for Zone 4 will be delivered from the 775 level. A conventional raise from 775 level is in place to access the existing backfill system on the 760 level near the junction of the 775 shaft access drift and the C-104 ramp. Backfill is then transferred from a conventional raise, approximately 1,000 m to an Alimak raise from 775 level to 925 level. For stopes below 925 level, backfill is transferred approximately 250 m to another Alimak raise joining 1055 and 925 levels. Slurry for cemented backfill will be delivered to 775 level via a diamond drill hole from surface and then to 870 level through an existing diamond drill hole. Slurry to mining areas below 925 level will be delivered via additional diamond drill holes to 1020, 1005 and 990 levels as mining progresses.

Ventilation for Zone 4 is provided via a 160 m long ventilation raise from 1075 level to 925 level. Fresh air is distributed from the Shaft and fed up the 1075 Zone 4 ramp. The air is then exhausted via the 835 level to 775 level exhaust raise.

Zone 6

Zone 6 dips at 68° from the horizontal and proves much more conducive to installing services than Zone 4. Zone 6 ore will report to the 925 and 775 rail haulage levels through a series of ore passes developed with Alimak raise climbers. Chutes will be installed on both rail haulages to facilitate rail car loading. The mining method in Zone 6 is open stoping with delayed backfill. The mining method is currently being transitioned to Avoca for Upper Zone 6, and if successful, implementation will begin in Lower Zone 6.

Delivery of backfill to stopes below the 775 level will be accomplished through the development of an Alimak raise from 905 level to 775 level. Backfill will be transferred from the conventional raise developed to 760 level, as mentioned previously in the Zone 4 section above. For stopes above 775 level, backfill will be delivered from the 550 level by means of a backfill raise to be developed from the 750 sublevel.

Ventilation for Zone 6 is distributed via the 925 level and exits at 750 level for the upper portion. It is then directed to 650 level and 435 level raise for exhaust.

Zone 7

Zone 7 dips at 65° from the horizontal and similar to Zone 6, proves much more conducive to installing services than Zone 4. Ore from Zone 7 will report to the 435 rail haulage level and 580 m loading pocket. The mining method in Zone 7 is open stoping with delayed backfill.

The fresh air for this zone is directed from surface via a 2.4 m diameter FAR to 350 level and then to 435 level, where the entire zone is ventilated and the later exhausted via two RARs.

Tousignant

The Tousignant Zone is located 3.5 km to the west of the Holt shaft and approximately 2 km west of the westernmost extents of Zone 4 underground workings. Tousignant extends from surface to a vertical depth of approximately 150 m. The ore body is shallow dipping (approximately 20° from the horizontal) and is composed of two lenses. There is a sub-vertical component to the ore body located to the north of the two flatter lenses; additional diamond drilling is needed to upgrade this vertical component to measured or

indicated resources. As a result, the sub-vertical lens (i.e. inferred resources) was not included in the mine plan. Infrastructure, such as power line extensions, security building, etc. will need to be constructed as part of the project. Initial clearing of the road from the portal to the mill has commenced. Ore will be trucked from the stopes to surface and transferred to the Holt mill via surface trucks.

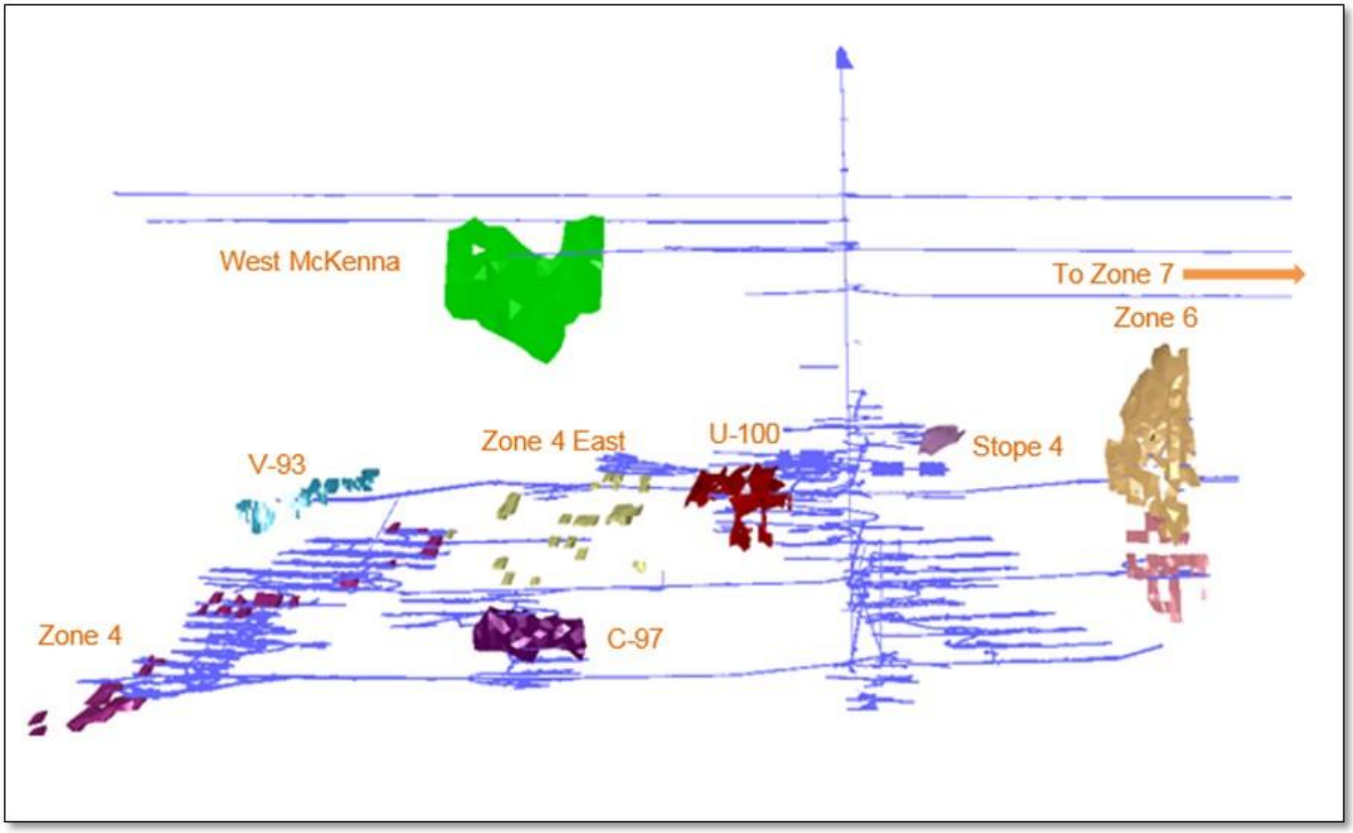

Figure 15-1: Holt mine vertical longsection (looking North; without Tousignant Zone).

15.1.2 Mining Shapes

Mineral resources were modelled in 3D using Datamine Studio 3. Mining shapes were then created within the Measured or Indicated Resource shapes on sections.

The block model was then run against the mining shapes. Dilution and mining extraction were then applied. Finally, each resulting shape was assessed independently and only the shapes that returned a positive operating cash flow were included in the mineral reserves.

15.1.3 Mining Method

The primary stoping method at the Holt Mine is mechanised long hole drilling and blasting within the mining blocks with rail transport to the shaft ore passes. The spacing between sublevels for long hole stoping varies between 20 m and 17 m, depending on the dip of the ore. Mechanized long hole stoping is planned to be used in all zones at the Holt mine. “Drift and pillar” stoping may be needed in some areas where the ore is too shallow and not amenable to long hole methods. Drilling is performed with top-hammer drills, with hole sizes ranging from 64 mm to 76 mm in diameter.

The Tousignant Zone is planned to be mined with modified room and pillar.

Zone 4

Zone 4 is a large ore zone dipping at approximately 30° from the horizontal and is located on the western extremity of the Holt mine. The zone is bounded by the C-97 mining block on the east and is located between 1075 level and 775 level. Mineral reserves for Zone 4 (including Zone 4 East) are estimated at 1.35 million tonnes grading at 4.07 g/t.

Zone 4 is accessed by mechanised equipment via ramps and sublevels connected to two main rail haulage levels 925 and 1075. Zone 4 is divided into two mining blocks: the upper mining block represents the stopes reporting to the 925 haulage level and the lower mining block represents the stopes reporting to the 1075 haulage level. The use of both haulage levels provides increased flexibility to the overall Holt mine plan.

The mine extraction sequence for Zone 4 is using a primary-secondary stoping arrangement with cemented rock fill being used in the primary stopes. Strike length is set at 15 m for the primary stopes and 20 m for the secondary stopes. Sublevels in Zone 4 are spaced 17 m apart due to the shallow dipping nature of the ore within the zone. The current mine plan includes stopes being mined using up holes, with the remainder of the stopes being mined using down holes. This method of combining up and down hole configurations helps minimize hole length and increases accuracy of hole drilling. A typical production ring section is shown in Figure 15-2.

A dilution factor of 15% was applied to mining shapes. Dilution material was assigned a grade of 0.3 g/t. Mining extraction was set at 90%. Cable bolts will be used in the stope hanging wall to help mitigate dilution.

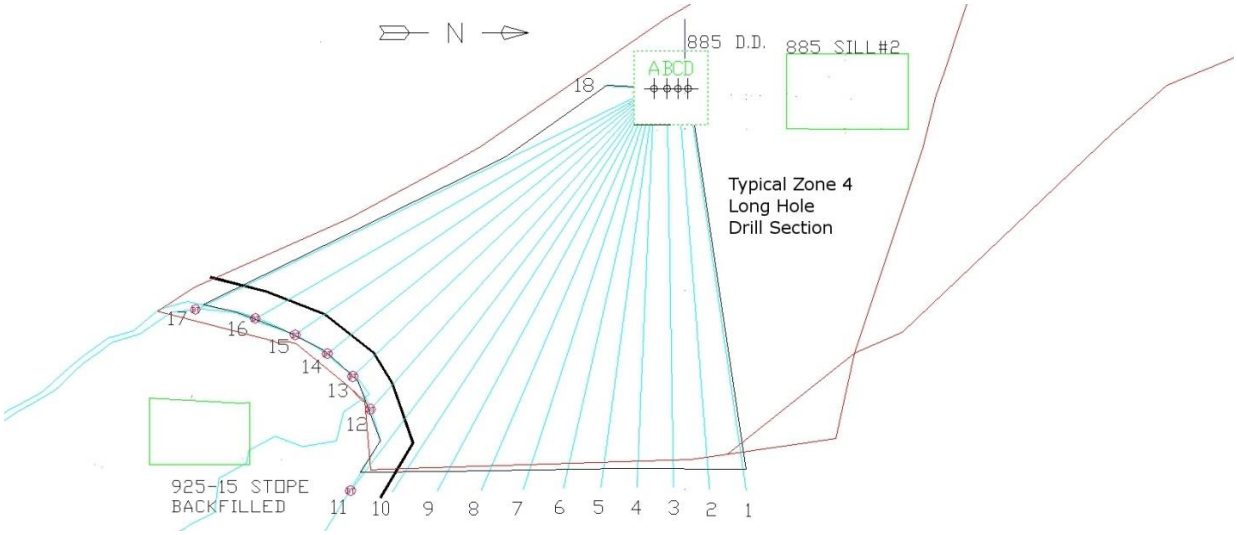

Figure 15-2: Typical Zone 4 long hole ring section view.

Zone 6

Zone 6 is a steeply dipping ore body located on the east side of the Holt mine, centered near the 10850 easting coordinate. The mineral reserves for Zone 6 (including Zone 6B) are estimated at 809,500 tonnes grading at 4.92 g/t.

Zone 6 is planned to be accessed via a ramp system and sublevels spaced at 20 m intervals for “conventional long hole” stoping. Accesses will be connected to haulage levels on 925, 775 and 1075 via drifts and ore passes.

The mine extraction sequence for Zone 6 is using a primary-secondary stoping arrangement with cemented rock fill being used in the primary stopes. The strike length is set at 20 m for all stopes (primary and secondary). The delivery of cemented rock fill to the upper portion of the zone will be initiated from the 435 level cement plant. From here a slurry hole has been drilled down to 775 level backfill system, which will deliver cement to the lower portion of the zone. Secondary stopes are planned to be filled with rock fill produced during development of the ramp and footwall drifts.

Upper Zone 6 is currently transitioning to the Avoca mining method for the extraction of its reserves. If proven to be viable, it is expected that this mining method will be incorporated into the lower portions of the zone.

Ore will report to one of three rail haulage levels (775, 925, or 1075 level, depending on the stopes elevation) via an internal ore pass system. Ore will then be trammed on rail to the shaft ore pass system.

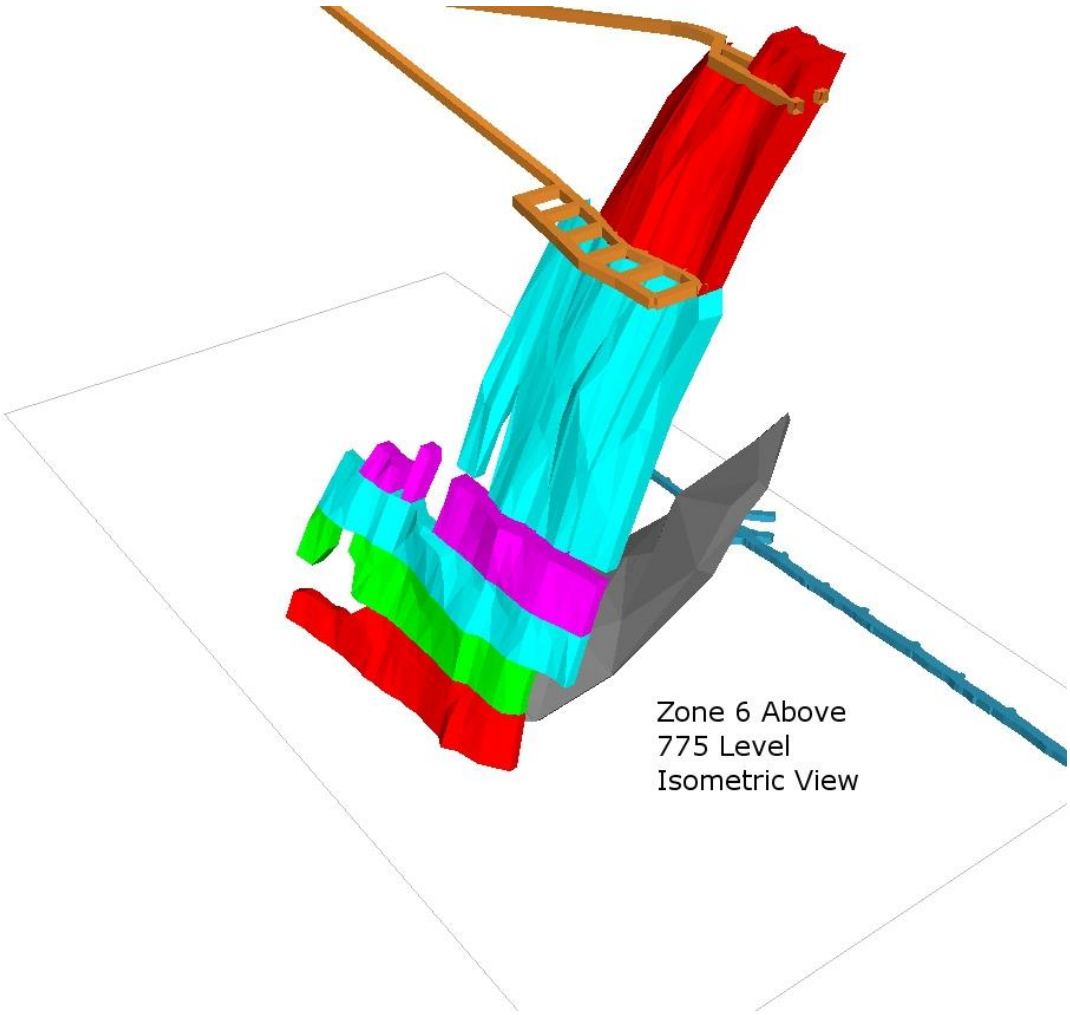

Figure 15-3: Zone 6 isometric.

Zone 7

Zone 7 is a steeply dipping ore body located on the eastern most side of the Holt mine (Figure 15-4). The mineral reserves for Zone 7 are estimated at 1.06 million tonnes grading at 4.49 g/t.

Zone 7 is planned to be accessed via a ramp system and sublevels spaced at 20 m intervals for open stoping. Accesses will be connected to the 435 haulage level via drifts and ore passes.

The mine extraction sequence for Zone 7 is using a primary-secondary stoping arrangement similarly to Zone 6. Cemented rock fill being will be used in the primary stopes and secondary stopes will be filled with rock fill produced during development of the ramp and footwall drifts. The strike length is set at 20 m for all stopes (primary and secondary). The delivery of cemented rock fill to the upper portion of the zone will be initiated from the 435 level cement plant.

Ore will report to the 435 rail haulage level and subsequently to the 580 m loading pocket.

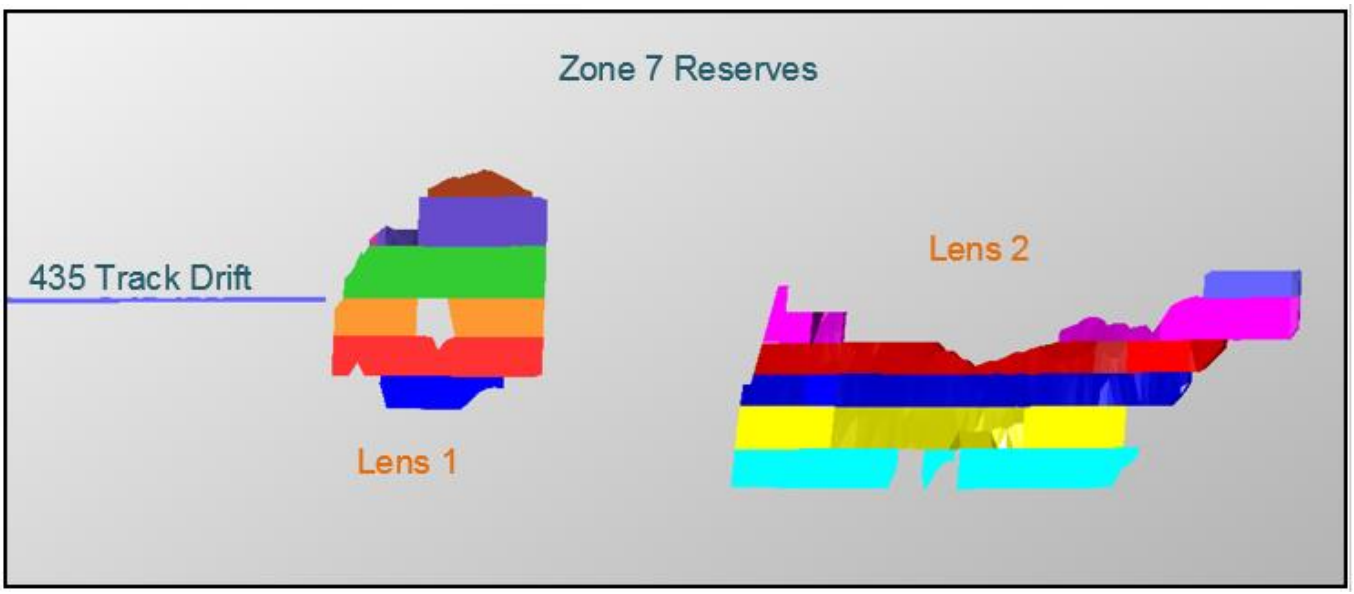

Figure 15-4: Zone 7 Reserve Lenses.

V-93 Zone

V-93 is a steeply dipping ore body located to the south of Zone 4 and above 775 level on the west end of the mine. The mineral reserves for V-93 are estimated at 100,184 tonnes grading at 4.59 g/t.

V-93 Zone is planned to be accessed from a ramp system connected to the 775 level with sublevels spaced at 20 m intervals. The zone is planned to be mined using longitudinal long hole retreat method. The stopes will be backfilled using cemented rock fill from the planned 775 level backfill system. Rock fill will be provided from development headings or could be trammed from Zone 6 development when available.

15.1.4 Geomechanical

Reports by Golder Associates related to the Holt Mine and dated from 1994 to 1999 are available on site. These reports provide relevant background information but are for the most part related to older areas of the mine, which will only be subject to some remnant mining. Ground Control reporting from Golder Associates resumed in 2013 and continued into 2016, these were mainly focused on annual site visits and sill pillar extraction. All future reporting will be completed in house. No adverse ground conditions have been reported throughout the mine. The planned mining methods all incorporate backfill or pillars and the stope dimensions are based on local experience.

Hanging wall support of longhole stopes are planned on a stope by stope basis. Based on the outcome of empirical analysis (i.e. Stability Graph) or geological information, hanging wall support may be required. In this case, 7 m long cable bolts (typically) will be installed.

Ground support in ore headings typically consists of 1.8 m friction bolts (e.g. Split Sets) in the walls (Figure 15-5), 1.2m friction bolts in waste headings, (Figure 15-6) installed on a 1.2 m by 1.2 m square pattern and alternating rows of 1.2 m mechanical bolts and 1.8 m resin-grouted rebar in the back with wire mesh. In intersections and localized areas requiring extra support, 2.4 m resin-grouted rebars or 3.0 m spin cables are used in permanent locations or 3.0 m swellex for temporary headings.

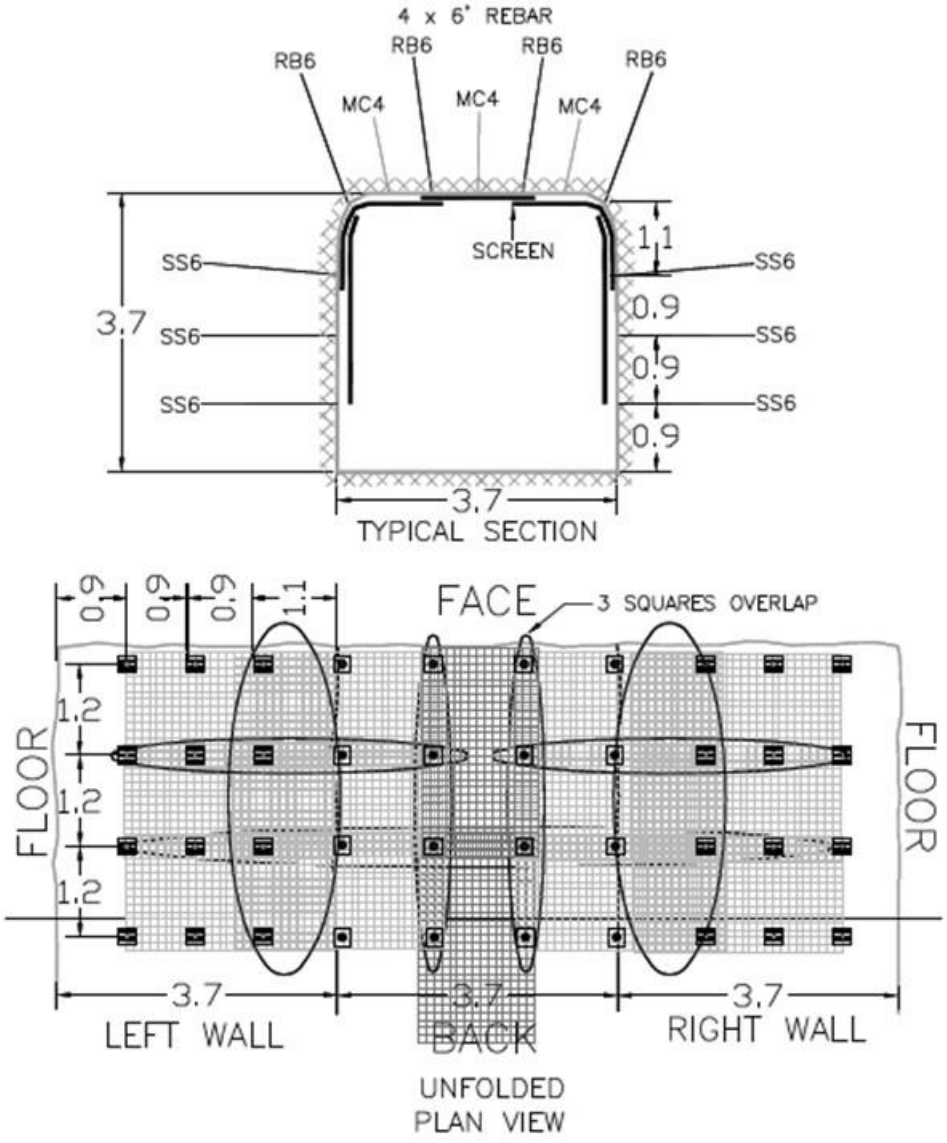

Figure 15-5: Ground support standard for ore headings at Holt mine.

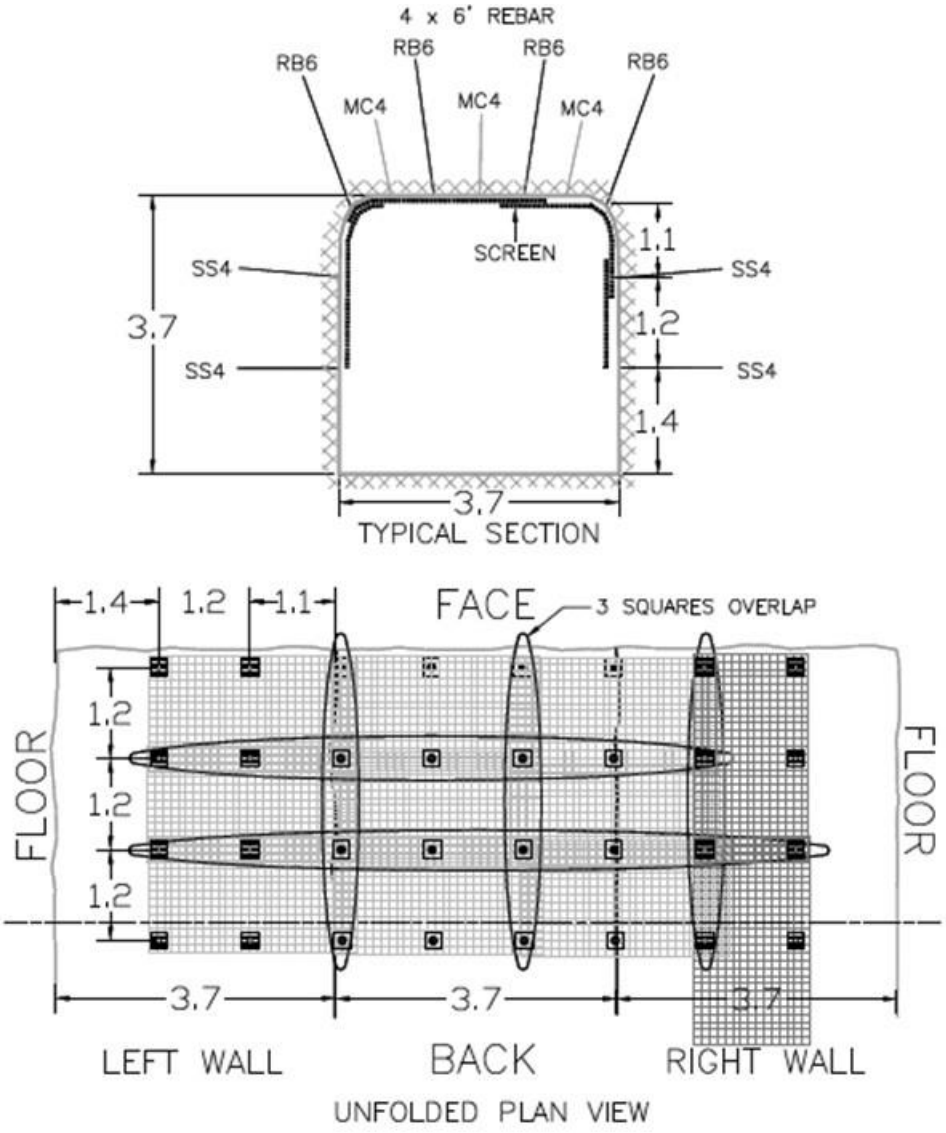

Figure 15-6: Ground support standard for waste heading at Holt mine.

15.1.5 Mine Access and Development

The Holt Mine is accessed by a single shaft, which extends to a depth of 1,195 m from surface. It has three compartments from surface to the 350 m level and four compartments to the 1,195 m level. The shaft has been deepened on several occasions. The shaft is rectangular and has timber sets and guides.

Access to planned mining areas is gained from the four main rail haulage levels: 435, 775, 925 and 1075 levels. The rail haulage drifts were developed 3 m wide by 3 m high, making access between mining zones with large equipment a difficult task. An existing main ramp system is located within the C-104 Zone and extends from 650 level to 1062 level. Sublevel accesses from the main ramp were developed by previous owners at vertical intervals of 20 m. The main ramp has shaft access on four levels: 650, 700, 775 and 925 levels. The 1075 main haulage level is connected to the main ramp system via a 2 m by 2 m raise from the 1062 level and through an internal ramp in Zone 4. A ramp system was also developed by previous owners in the C-97 zone. The C-97 ramp consists of two ramps: one is a decline from the 925 main haulage and extends to the 970 level, the other is an incline extending from 1075 level to 1010 level. For both ramp systems, there is no connection between the 1075 haulage level and the haulage levels above.

An internal ramp system has been developed in Zone 4 from the 925 haulage level and the 1075 haulage level. The Zone 4 ramp below 1075 level will be mined to accommodate 30 tonne trucks for reserve extraction. The internal ramp system established in Zone 6 connects 775 level to 610 level for the upper portion and is planned to connect the 925 and 775 haulage levels for the lower portion. The system will not include a connection between 1075 level and the haulage levels above.

The Tousignant Zone is planned to be accessed via a portal and decline ramp, which will be located approximately 3 km west of the Holt shaft. A main ramp is planned to be developed in ore through lens 1 to access mining areas and in lens 2, thus minimizing development costs. Mining will retreat from the deeper area (i.e. lens 2) to the shallower area (i.e. lens 1), progressively losing the ramp access to the bottom area.

Development requirements are shown in Table 15-1 and Table 15-2.

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total Capital Dev	6,521	6,646	7,015	7,385	6,304	6,304	6,304	6,304	2,306	55,087
Total Operating Dev	4,997	5,094	5,377	5,660	5,660	5,660	5,660	5,660	5,660	49,424
Total Development	11,518	11,740	12,392	13,044	11,963	11,963	11,963	11,963	7,965	104,511

Table 15-1: Holt Mine development requirements.

Year	Year 1	Year 2	Total
Total Capital Development	1,154	2,306	3,460
Total Operating Development	1,036	5,660	6,696
Total Development	2,190	7,965	10,155

Table 15-2: Tousignant Zone.

15.1.6 Capital Development

Details of capital development are listed in Table 15-3 and Table 15-4.

	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Ramps	1,765	1,799	1,899	1,999	1,706	1,706	1,706	1,706	624	14,912
Raising	530	540	570	600	512	512	512	512	187	4,477
Lateral	4,226	4,307	4,546	4,785	4,085	4,085	4,085	4,085	1,494	35,698
Total	6,521	6,646	7,015	7,385	6,304	6,304	6,304	6,304	2,306	55,087

Table 15-3: Capital development at Holt Mine.

	Year 1	Year 2	Total
Ramps	312	624	937
Raising	94	187	281
Lateral	748	1,494	2,242
Total	1,154	2,306	3,460

Table 15-4: Capital development at Tousignant.

15.1.7 Operating Development

Details of operating development are listed in Table 15-5 and Table 15-6.

	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Lateral	4,292	4,375	4,618	4,861	4,861	4,861	4,861	4,861	4,861	42,451
Raising	705	719	759	798	798	798	798	798	798	6,973
Total	4,997	5,094	5,377	5,660	5,660	5,660	5,660	5,660	5,660	49,424

Table 15-5: Operating development at Holt Mine.

	Year 1	Year 2	Total
Lateral	890	4,861	5,751
Raising	146	798	945
Total	1,036	5,660	6,696

Table 15-6: Operating development at Tousignant.

15.1.8 Equipment

The list of major mobile equipment is shown in Table 15-7. The 3.5 yd^3 Load-Haul-Dump (LHDs) and single boom jumbos will be the primary development and production units at the Holt Mine followed by the locomotives and four tonne rail cars for the transport of the ore to the shaft. Mucking machines are used for track drifting development. Approximately 80% of the locomotives and batteries were replaced with AC units. It may be necessary to replace additional locomotives and batteries at the Holt Mine as the need arises.

EQUIPMENT #	EQUIPMENT DESCRIPTION/MODEL	EQUIPMENT #	EQUIPMENT DESCRIPTION/MODEL
MNCR018	KUBOTA RTV 900XT MANCARRIER	**SLFT410**	WALDEN SCISSOR TRUCK
MNCR019	KUBOTA RTV X900 MANCARRIER	**SLFT412**	MARCOTTE SCISSOR TRUCK
MNCR020	KUBOTA RTV X900 MANCARRIER	**MNCR425**	KUBOTA MANCARRIER
MNCR022	KUBOTA RTV X900 MANCARRIER	**SLFT428**	WALDEN SCISSOR TRUCK
MNCR023	KUBOTA RTV X900 MANCARRIER	**SLFT433**	WALDEN SCISSOR TRUCK
MNCR026	KUBOTA RTV X900 MANCARRIER	**MNCR512**	KUBOTA MAN CARRIER M6800
MNCR027	KUBOTA RTV X900 MANCARRIER	**MNCR521**	UT99 Man Carrier
MNCR028	KUBOTA RTV X900 MANCARRIER	**FKLT577**	KUBOTA MNEMASTER FORKLIFT R420
MNCR030	KUBOTA RTV X900 MANCARRIER	**FKLT578**	KUBOTA MNEMASTER FORKLIFT R520
MNCR031	KUBOTA RTV X900 MANCARRIER	**FKLT579**	KUBOTA MNEMASTER FORKLIFT R420
MNCR032	KUBOTA RTV X900 MANCARRIER	**FKLT584**	MINECAT FL6000
JMBO101	MTI JUMBO CDJ120/HC80	**DIESEL WELDER**	MILLER WEDLING MACHINE
JMBO102	MTI JUMBO CDJ120/HC80	**DIESEL WELDER**	MILLER WEDLING MACHINE
JMBO104	MTI JUMBO CDJ120/HC80	**DIESEL WELDER**	MILLER WEDLING MACHINE
JMBO105	MTI JUMBO CDJ120/HC80	**Rock Breaker1020**	Teledyne Rock Breaker
JMBO112	Copco S1D	**Rock Breaker900**	Teledyne Rock Breaker
107Boart	Boart Longyear Air Buggy	**Rock Breaker 750**	Teledyne Rock Breaker
SCOP200	2 YARD ST2D	**LONGTOM #1**	Longtom Air Drill
SCOP202	2 YARD JCI250M	**LONGTOM #2**	Longtom Air Drill
SLFT300	MARCOTTE SCISSOR TRUCK	**LONGTOM #3**	Longtom Air Drill
HLTK307	SANDVIK EJC 416 HAUL TRUCK	**LM56**	Muck Machine
HLTK313	COPCO MT2010 HAUL TRUCK	**LM70**	Muck Machine
BH007	KUBOTA DITCH DIGGER KX41-3V	**LM70**	Muck Machine
BH015	KUBOTA DITCH DIGGER KX41-3V	**Loci 01**	Single Locomotive
BH017	KUBOTA DITCH DIGGER KX41-3V	**Loci 02**	Single Locomotive
RB009	KUBOTA ROCK BREAKER KX057-4	**Loci 03**	Single Locomotive
RB011	KUBOTA ROCK BREAKER KX080-3	**Loci 06**	Single Locomotive
SCOP351	WAGNER SCOOP ST3.5	**Loci 07**	Single Locomotive
SCOP354	WAGNER SCOOP ST3.5	**Loci 08**	Single Locomotive
SCOP355	WAGNER SCOOP ST3.5	**Loci 09**	Single Locomotive
SCOP357	WAGNER SCOOP ST3.5	**Loci 010**	Single Locomotive
SCOP358	WAGNER SCOOP ST3.5	**Loci 011**	Single Locomotive
SCOP359	SCOOP 3.5 Caterpillar – R1300	**Loci 013**	Single Locomotive
SCOP361	WAGNER SCOOP ST3.5	**Loci 014**	Single Locomotive
SCOP363	SCOOP 3.5 Caterpillar – R1300	**Loci 015**	Single Locomotive
SCOP364	SCOOP 3.5 Caterpillar – R1300	**Loci 017**	Single Locomotive
SCOP365	SCOOP 3.5 Caterpillar – R1300	**Loci 018**	Single Locomotive
SCOP366	SCOOP 3.5 Caterpillar – R1300	**Loci 019**	Single Locomotive
SCOP368	SCOOP 3.5 Caterpillar – R1300	**Loci 020**	Single Locomotive
SCOP383	SCOOP 3.5 Caterpillar – R1300	**Loci 021**	Single Locomotive
SCOP384	SCOOP 3.5 Caterpillar – R1300	**Loci 022**	Single Locomotive
SCOP401	JCI SCOOP 2.5 YARD	**Loci 0112**	Single Locomotive
		Loci 0114	Single Locomotive
		Loci 05	Mansha Locomotive
		Loci 12	Mansha Locomotive
		Ore Car - 74 Cars	4 Ton Ore Cars

Table 15-7: Major mobile equipment at Holt.

15.1.9 Production Rate and Life of Mine Plan

Production from the Holt Mine will increase from 1,350 tpd to 1,500 tpd over the next few years. For 2017 and 2018, production will rely heavily on Zone 4 and Zone 6.

Zone 4 ore is delivered to the lowest loading pocket in the mine located on 1145 m. Zone 6 ore will report, to the 890 m loading pocket; skipping time will be greatly reduced and will allow for the production rate increase. Zone 7 ore is planned to be delivered to the 580 m loading pocket. An average mining rate of 1,400 tpd is planned over the seven and a half year mine life (based on mineral reserves only). As additional mining areas become available, the production rate will increase to approximately 1,500 tpd. Since the Holt Mine is currently in production, no additional time is needed for activities typically associated with operation start up.

The Life of Mine plan (LOM) for the Holt Mine is shown in Table 15-8. The LOM plan for the Tousignant Zone is shown in Table 15-9.

	2017	2018	2019	2020	2021	2022	2023	2024	Total
Tonnes (kt)	483	493	520	548	548	548	548	447	4,134
Grade	4.73	4.42	4.45	4.37	4.39	4.41	4.43	4.37	4.44
Ounces (koz)	74	70	74	77	77	78	78	63	591
Mining rate (tpd)	1,324	1,350	1,425	1,500	1,500	1,500	1,500	1,500	1,415

Table 15-8: Holt Mine LOM plan.

	2024	2025	Total
Tonnes (kt)	100	200	301
Grade	5.50	5.50	5.50
Ounces (koz)	18	35	53

Table 15-9: Tousignant Zone LOM plan.

15.2 Holloway

Mining activities at the Holloway mine were curtailed at the end of 2016 and the operation was placed on temporary suspension. Some of the mobile equipment was

brought up to surface and redeployed to other KLG operations. Similarly, most of the personnel were re-assigned to other KLG operations.

KLG is planning to embark on an exploration campaign, both on surface and underground at the Holloway mine.

Pending successful outcome from the exploration program, it is anticipated that the operation will be re-started in the upcoming years.

16.0 RECOVERY METHODS

The following sections are copied (and updated) from the previous technical report (Cater and Salehi, 2015). A summary is presented in the following sub-sections. No material changes occurred since the last technical report was filed in 2015

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 a Wonderware system and Modicom programmable 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 a pre-aeration tank, which gravity feeds five carbon-in-leach (CIL) tanks in series. 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.

Laboratory

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" balls
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.

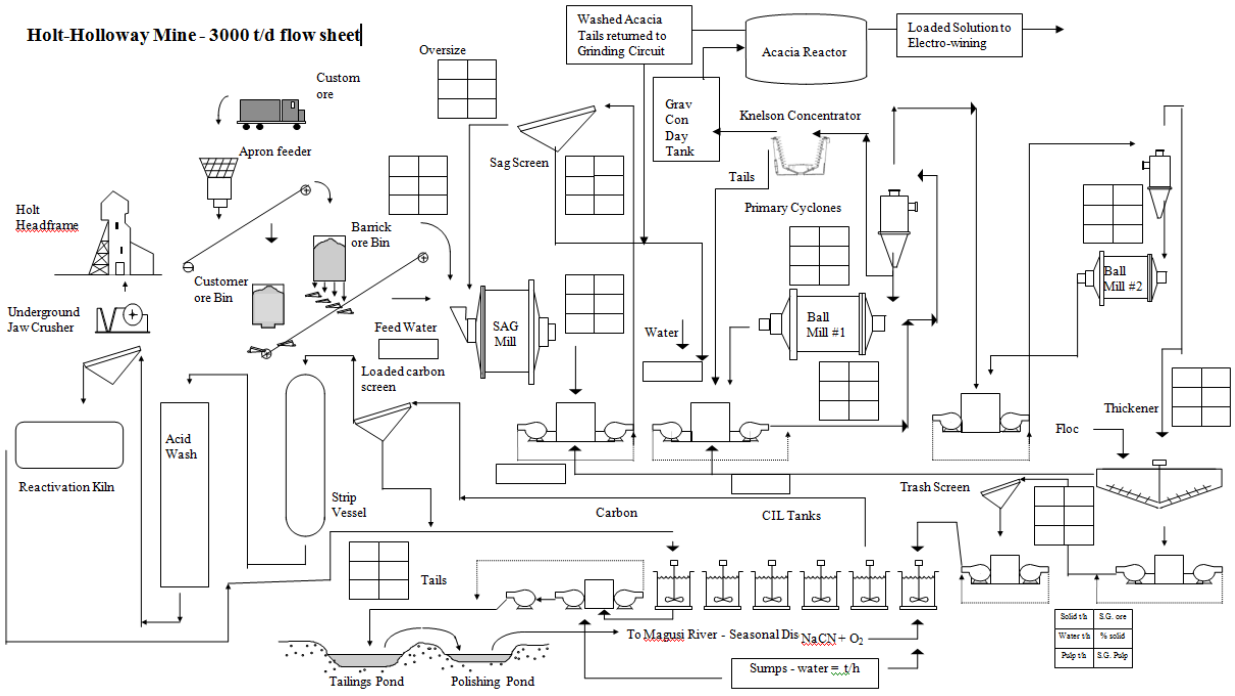

Figure 16-1: Process flow sheet.

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

17.0 PROJECT INFRASTRUCTURE

17.1 HOLT

17.1.1 Surface Buildings

Surface buildings at the Holt property were erected by previous owners. The main ones are:

- A security gate house;
- A hoist house;
- A headframe;
- Administration building (housing Engineering, Geology, Operations, Administration, two dries and conference rooms);
- Surface Maintenance Shop and offices;
- Assay lab building;
- Exploration Trailer;
- Mill building (including two bins, conveyor and thickener);
- Surface sub-station and control room;
- Various storage buildings;
- Backfill Plant and Silos; and,
- A scale house.

The Holt surface general layout is shown in Figure 17-1.

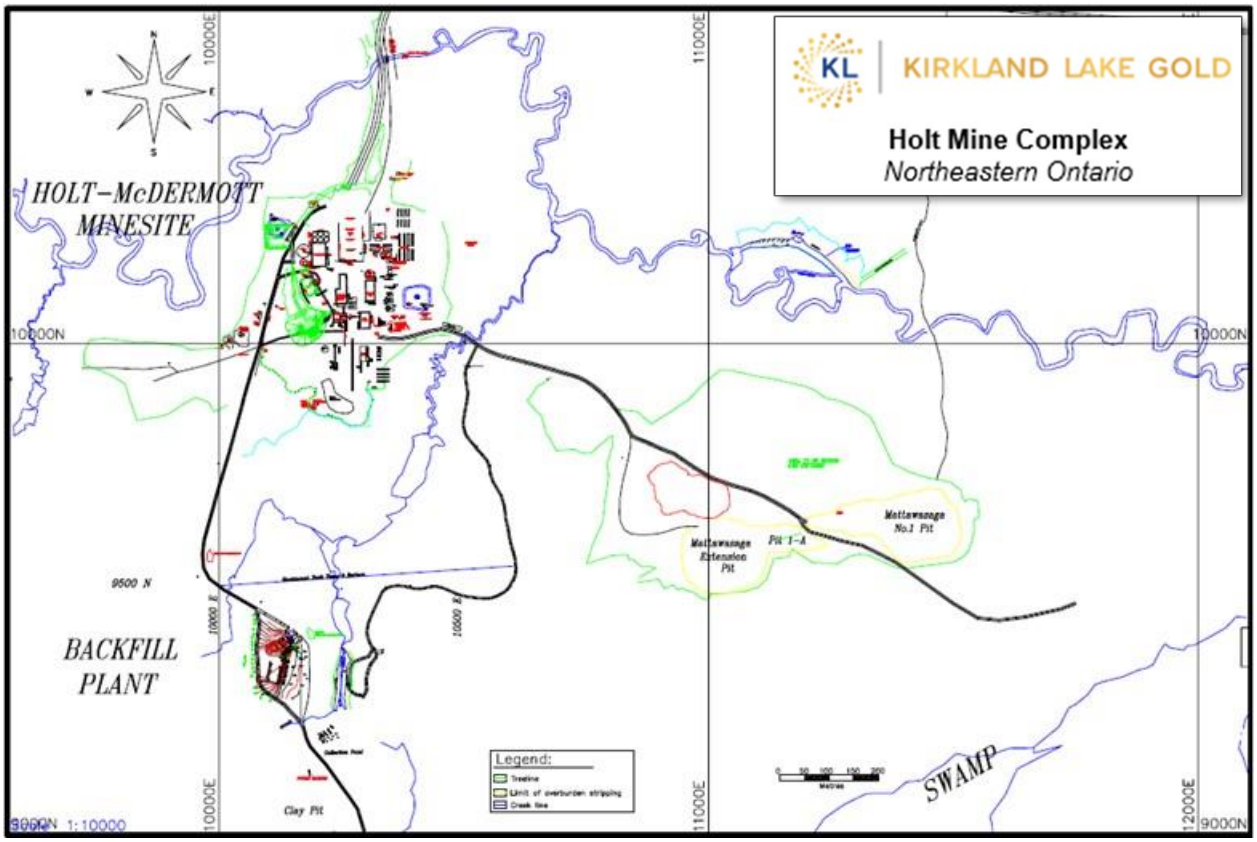

Figure 17-1: Holt property surface general arrangement (After SWRPA, 2008).

17.1.2 Road Upgrade and Ore Transportation

Ore from the Holt Mine is dumped directly into the surface ore bins from the skips via a conveyor belt. Construction of an approximately 3 km long haulage road will need to occur once the Tousignant project commences. The road will start at the portal and end at the grizzly already established near the Holt Mill.

17.1.3 Power

Power is supplied from the provincial electrical grid and is delivered to transformers for the mine and mill at Holt. The site has a limited amount of emergency standby diesel generation capacity to maintain critical items in the mine and mill. There is one 800kW generator at the Holt Mine and the backup transformer located on surface (1,150V to 4,160V), which has recently been replaced.

The underground is serviced by two feeders. Power is supplied to the mine and distributed at 4,160 V with 4,160 V/600 V transformers as needed, to supply areas. The feeder cables have been expanded to Zone 4,Zone 6 and Zone 7.

17.1.4 Underground Mine Dewatering and Fresh Water Requirements-pierre to check

Fresh Water

Water from the abandoned upper workings is directed via a ditch flow and a series of drain holes to a dam located on the 400 m level and the 530 discharge pump staging level. All required clean water below the 400 level is supplied by the dam, and excess water is sent to the pump staging area on 530 level.

Dewatering

All active heading water discharge is directed via a series of drain holes to a clean and dirty water sump complex in each mining area. Excess fine particles are removed from the dirty water sumps by LHDs. Clean water from these sumps is pumped by air or electric pumps. The water is discharged to each level's main sump. From the main sumps water is pumped by electric pumps to the 1110 m Geho pump dam or the 1075 m Jet pump underground reservoir.

The 1110 m Geho pump discharges to the 530 m pump staging area at a rate of 35 m^3/h and can handle up to 60% solids. The 149 kW (200 hp) 1075 m jet pump is a backup system for the Geho and can pump up to 40 m^3/h of clean water. It also discharges to the 530 m pump staging area.

All discharge water from the Geho or Jet pump report to a cone sump on the 530 m level. A flocculent is added to the cone sump to precipitate solids to the bottom of the sump. These solids are then pumped via a SLR pump to abandoned stopes in the south zone. The clean water overflow is pumped to surface via two 149 kW (200 hp) Jet pumps capable of pumping 40 m^3/h each.

Total mine discharge averages 800m^3/day to 1,500 m^3/day.

17.1.5 Underground Mine Ventilation

Primary ventilation at Holt is delivered by a 3-stage push-pull system, as described in Table 17-1.

Stage	Power	Location
1st Stage	250 hp	Surface fresh air raise
	125 hp	Surface fresh air raise
2nd stage	100 hp	650 Level
	100 hp	650 Level
	75 hp	700 Level
3rd stage	250 hp	Surface return air raise
	125 hp	Surface return air raise

Table 17-1: Primary ventilation system at the Holt Mine.

The primary ventilation system delivers a total airflow of 117 m^3/s to the underground workings. Both fresh air raise intake fans are equipped with propane burners (capacity of 117 MWh or 40 MBTU), which are used to heat the mine air during winter. The 186 kW (250 hp) surface fresh air fan feeds a 3.0 m diameter fresh air raise (FAR) to the 350 m level. The 93 kW (125 hp) surface fresh air fan feeds a 1.8 m diameter FAR to the 300 m level. Fresh air then travels through a series of raises to the 775 m level and is directed to the bottom of the mine (1075 level) via the shaft.

At the 925 m level, the fresh air stream splits: the first air stream ventilates the mining areas of Upper Zone 6, while the second air stream ventilates the mining areas of Zone 4.,

Both air streams join and ascend the C-104 ramp and stopes to the 2nd stage fans. After the 2nd stage fans, the air ascends raises to the 435 m level, 350 m level, and upwards to the 3rd stage Return Air Raise (RAR) fans.

17.1.6 Underground Material Handling

Ore and Waste Handling

In Upper and Lower Zone 4 and in Zone 6, ore and waste from development headings are mucked with 3.5 yd^3 LHDs. Stope ore is mucked via remote controlled 3.5 yd^3 LHDs. The ore and waste is dumped into an ore or waste pass system. Waste is re-mucked into excavated stopes and used as back fill. Ore is re-mucked with another 3.5 yd^3 LHD and loaded into the central ore pass system with grizzlies and rock breakers. It will then be pulled from a chute into ore cars.

Muck is transported from the active zones on 40 lb rail using tandem five ton Warren Loci's and five ton ore cars. These tandem Loci's can pull as many as eight ore cars at a time.

This muck is dumped using a Teledyne car dumpers near the shaft stations into the main ore pass, which reports to the 1110 crusher where the muck is reduced to an appropriate size for the mill grinder. From the crusher the muck is sent to the 1145 loading pocket where it is skipped to surface in eight ton skips.

The ore from Zone 6 will be transported by the same system but will report the 825 crusher and then to the 890 loading pocket.

Material Handling

Supplies required daily are sent underground via flat cars. Fuel and oils are sent via fuel/oil tanks mounted on flat cars and pumped into satellite fueling stations. All supplies are trammed to the active headings via locomotives.

Large gear and equipment are stripped down to fit in the shaft and are slung under the cage and re-assembled in the underground shops.

17.1.7 Communications

The communication network allows interfacing between the telephone system and the fibre optic system for all underground shops. A site-wide leaky feeder communication system has been installed. Communication facilities include site wide two-way radios, underground and surface paging phones, digital telephone service to offices and specific areas underground, and a cellular phone for the security staff.

17.2 HOLLOWAY

The Holloway mine was placed on temporary suspension at the end of 2016. The information contained in the previous technical report(Cater and Salehi, 2014) has not changed.

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 Holt and Holloway gold production.

18.2 Material Contracts

Contract surface exploration drilling services are provided by Asinii Drilling based in Matheson, ON. Underground contract drilling at the Holt mine is being conducted by Boreal Drilling based in Val d'Or (QC). Both contractors possess the necessary equipment, well trained personnel, replacement part inventory and have well documented drill experience on the property. These contracts can be discontinued by KLG at any time with advance written notification.

Explosives products are provided by Nordex. The main products used are: ANFO, cartridge explosives and detonators.

Security services at the Holt and Holloway sites are provided by Garda. Security personnel are always available on site, 24 hours per day.

Contracts are awarded through a tender process. The duration of the contracts is usually less than two years.

19.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

The Holt-Holloway mine site utilizes an Environmental Management System (EMS). This system embodies a recurrent review process of site environmental policies and procedures, permits and approvals. The EMS system repeatedly audits and sustains waste and hazardous waste management, recycling, landfill management, water and wastewater treatment and monitoring programs throughout the site.

This process is kept current though EMS revisions included as part of the continuous improvement review cycle. The EMS thus forms the basis for the monitoring, sampling, and reporting program requirements under each of the pertinent governmental agencies. More importantly, this allows verification that all the activities at the Holt and Holloway mines comply with government and company standards.

The Holt and Holloway mines utilize underground and surface water as part of the mining and milling process, in addition to domestic consumption. Water is collected, monitored, treated and released through an approved, regulated permitted industrial sewage works. All effluent discharge to the environment from the Holt and Holloway mines is controlled and monitored.

19.1 Summary of Environmental Studies

19.1.1 Terrestrial Environment

Surveys have been undertaken to provide further details on terrestrial vegetation and wildlife in areas that may be affected by mining activity, such as in the vicinity of the overburden and waste rock storage piles. Depending on the final detailed designs, additional studies may be undertaken.

19.1.2 Hydrogeological Characterization

Regional Surface Water Hydrology

Holt (Shaft #3)

The Holt Mine traverses two drainage systems, the Mattawasaga River system to the north and the Magusi River system to the south. The mine and mill site drains into the Mattawasaga River, which has an upstream drainage basin of approximately 45 km^2. The Tailings Management Facilities (TMF) area drains into the Magusi River system, which has a drainage basin of approximately 215 km^2. Both systems carry heavy

suspended solids loading during high water, owing to the prevalence of clay and silt substrates.

Water Survey of Canada stream flow records for two non-regulated watercourses (the Porcupine River - watershed area of 410 km^2 near Timmins - and the Blanche River - watershed area of 1,780 km^2 near Englehart) are available to calculate average runoff yield for the region. For the period between 1977 and 1993, the mean annual runoff was measured at 439.0 mm for the Porcupine River at Hoyle, and 400.5 mm for the Blanche River above Englehart. The average runoff value from the two watersheds is 420 mm.

The majority of runoff occurs in the spring, coincident with the snow melt. A second, much smaller, runoff peak typically occurs in October or November. Lowest runoff conditions normally occur during the mid-winter months (January through March), when precipitation is accumulated and held as snow and ice. A second period of relatively low flow occurs in mid to late summer.

Holloway (Shaft #2)

The Holloway project site straddles two watersheds: the Lightning River watershed and the Mattawasaga River watershed, both of which drain into Lake Abitibi.

Water pumped from the Holloway Mine is discharged into a polishing pond system. The decant in the polishing pond system allows the clarified mine water to either be discharged through a MISA control point into the Lightning River watershed. Alternatively, it can be pumped through a pipeline into the Holt Tailings Management Facility (TMF) permitted municipal industrial sewage works.

Surface runoff from the Holloway mine site drains south to the Mattawasaga River watershed.

Mine discharge contributes approximately 250 m^3/day during normal operations. The baseline flow is estimated at 150 m^3/day during periods without mining operations.

Results of a baseline study suggest that the flow in the Lightning River averaged 2,500 m^3/day. This provides a minimum dilution ratio of 10:1 during normal operations and 16.7:1 during temporary suspension or inactivity.

The hydrological characteristics of the Lightning River watershed drains an area of 105 km^2, directly to the north and encompassing a portion of the project site. There are three main tributaries, Trollope Creek and two un-named branches (Branch 1 and Branch 2), which drain the western and southern portions of the watershed.

The upper system is characterized by a hydrograph, which peaks rapidly in response to rainfall and snow melt events.

Very little base flow is evident in the system and can be related to the predominance of relatively impervious clay solids with a high run-off coefficient and limited groundwater inputs.

The Mattawasaga watershed drains an area of 45 km^2, opposite the mine site, and is of strongly meandering form and low gradient.

Surface Water Quality – Pre-Development Conditions

In general, the pre-discharge conditions for the Magusi and Mattawasaga rivers are characterized by brown coloured water imparted by humic acids and turbid conditions. Suspended solids levels range from lows of less than 5 mg/L during periods of ice cover and low flows, to highs in the range of 30 mg/L to 60 mg/L during high flow conditions. Elevated suspended solids values are characteristic of local rivers flowing over a predominantly clay and silt substrate.

Closely associated with elevated suspended solids levels are high background concentrations of iron. Average iron concentrations during the pre-discharge monitoring period ranged from 0.90 mg/L to 1.55 mg/L. These background levels are higher than the Provincial Water Quality Objective (PWQO) for iron of 0.3 mg/L, but are typical of local river systems.

Copper concentrations in the Magusi and Mattawasaga Rivers during the pre-discharge period were also characteristically high, ranging from 0.001 mg/L to 0.044 mg/L, frequently exceeding the PWQO value of 0.005 mg/L. Concentrations of nickel were generally low and below the PWQO objective of 0.025 mg/L. Zinc concentrations fluctuated markedly throughout the year with mean values of 0.008 mg/L to 0.025 mg/L, with values exceeding occasionally the PWQO value of 0.030 mg/L. Arsenic concentrations were quite low, being less than 0.02 mg/L and generally less than 0.002 mg/L.

High variability in water temperature was observed, with spring and summer temperatures reaching 24°C in May 1991. Dissolved oxygen levels were between 7 mg/L and 12 mg/L, which are consistent with what might be expected in a northern watershed. Turbid conditions were observed on the Lightning River with Secchi depth measurements of 7 cm to 49 cm. Branch 1 was notably clearer, with Secchi depths of up to 50 cm to 70 cm.

Streams in the project vicinity are described as neutral to slightly acidic, with pH values ranging between 5.5 and 8.3. Only three samples taken during field sampling were outside of the PWQO values of between 6.5 and 8.5. Alkalinity ranged from 3 mg/L to 180 mg/L, while hardness ranged from 17 mg/L to 162 mg/L.

Nitrogen content, (in the form of nitrite, nitrate, Total Kjeldahl Nitrogen and total ammonia), was measured at all stations. Ammonia concentration tended to increase during winter months when ice cover leads to lower oxygen levels.

All monitoring stations along the Lightning River during the baseline study showed iron levels greater than the PWQO of 0.3 mg/L. The average iron concentration was 1.6 mg/L, ranging from 0.54 mg/L to 11 mg/L. These levels are naturally occurring and are common in northern Ontario. They are commonly associated with high suspended solids levels. Suspended solids levels ranged from less than2 mg/L to 44 mg/L.

19.1.3 Hydrological and Aquatic Habitat Assessments

Hydrological assessments in the past were in large part developed by pro-rating regional flow data to the local watershed areas. Current studies are focusing on developing more accurate estimates of stream flows, runoff volumes and site drainage patterns associated with the existing mine site and future developments. Efforts include detailed watershed mapping initiatives, as well as the development of a stream flow monitoring station on the Magusi River. This information will be important in assessing potential adverse environmental effects to the downstream aquatic receiving environment and assisting in storm water management planning activities. Aquatic habitat assessments undertaken in the past were based on data collection initiatives recommended in prior studies, in the context of the proposed project, and additional sampling of stream sediments, water chemistry and benthic macro invertebrates were also undertaken. As well, future aquatic assessment programs will be expanded to include areas that could potentially be affected by future mining activity. Of particular importance is the thorough assessment of potential fisheries habitat areas in the areas of proposed mine development.

19.1.4 Waste Characterization Studies

A comprehensive geochemical characterization of all mine waste materials is to be completed to support the development of an integrated water and waste management plan for the site. In developing the mine model, waste and host rock materials have undergone a comprehensive geological classification to ascertain the total volumes of materials that will be generated. Representative samples from each type of waste material were selected and tested for their acid generating and metal leaching potential as per the relevant guidance documents.

19.2 Tailing Management Plan

Ore will be processed at the Holt mill progresses to the TMF. The TMF contains four individual basins: two tailing ponds, one sludge precipitate pond and one polishing pond. Within the tailings facilities 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.

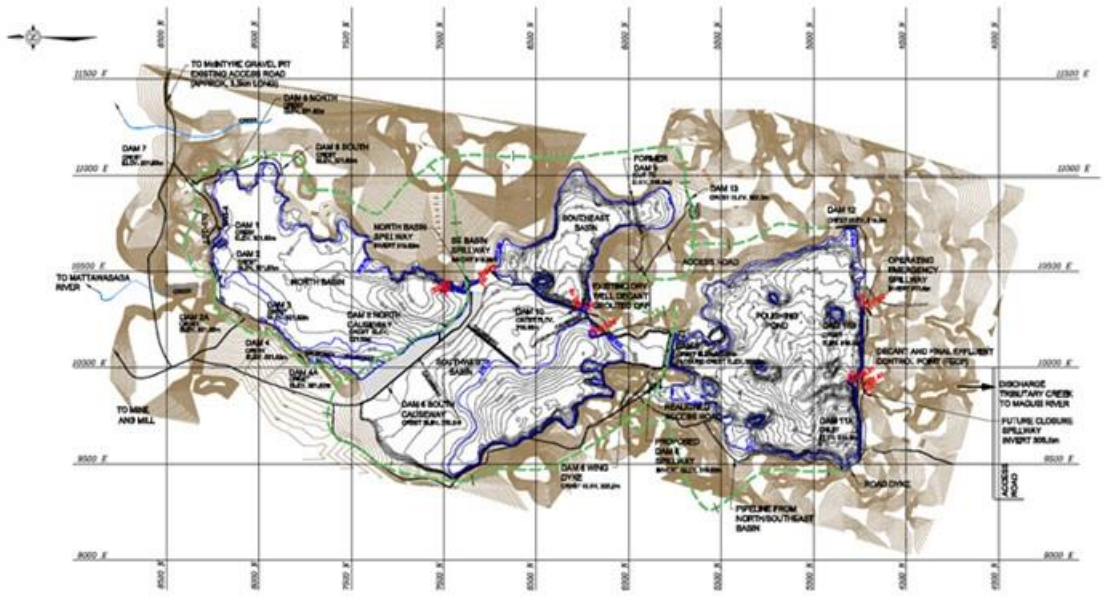

Figure 19-1: Plan View of the TMF.

19.3 Permits Status and Posted Bonds

The reader is referred to Section 3.3

19.4 Social and Community

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.

19.5 Closure Plan

As part of the Holloway Mine development phase, a Closure Plan was submitted to government agencies as required under the Mining Regulations. The mine received government approval of this Closure Plan in 1996. In 2005, an addendum to the Holloway Shaft #1 and #2 Closure Plan included additional closure costs for the Blacktop Project and was submitted to government agencies as required, under the Mining Regulations. In 2006, an addendum to the Holloway Shaft #1 and #2 Closure Plan cost update was submitted to government agencies as required under the Mining Regulations.

In addition, an addendum to the Holt Shaft #3 (former Holt McDermott) Closure Plan was also submitted for a cost update, to government agencies as required under the Mining Regulations.

KLG has submitted an amendment to the closure plan to the MNDM in 2016 to amalgamate Holt and Holloway properties under one closure plan. A reply from MNDM is expected in 2017.

20.0 CAPITAL AND OPERATING COSTS

20.1 Capital Costs

20.1.1 Basis of Estimate

Capital costs estimate for major items is based on historical costs at the Holt and Holloway mines, costs included in the 2013 Budget or budgetary quotations from suppliers in the industry.

20.1.2 Cost Estimate

Capital expenditures budgeted for the Holt Mine, are $26.8 M in 2017. The majority of these expenditures, $18.1 M (68% of Holt budgeted capital expenditures), will be incurred developing Zone 4 and Zone 6 (vertical and lateral). In addition to the deferred development, a further $3.9 M (15% of Holt budgeted capital expenditures) will be spent on purchasing fixed and mobile equipment. The remaining amount will be spent on infrastructure, mainly in Zone 4 and Zone 6.

Details on capital expenditures for the LOM are provided in Table 20-1.

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Holt Mine ($M)										
Development	18.0	18.4	19.4	20.4	17.4	17.4	17.4	14.3	-	142.9
Equipment	3.9	3.1	3.2	3.4	3.4	3.4	3.4	2.8	-	26.5
Infrastructure	4.9	5.0	5.3	5.6	2.7	2.7	2.7	2.2	-	30.9
Subtotal	26.8	26.5	27.9	29.4	23.5	23.5	23.5	19.2	-	200.3
Tousignant Project ($M)										
Development	-	-	-	-	-	-	-	3.2	6.4	9.6
Equipment	-	-	-	-	-	-	-	0.6	1.2	1.9
Infrastructure	-	-	-	-	-	-	-	0.5	1.0	1.5
Subtotal	-	-	-	-	-	-	-	4.3	8.6	12.9
Total by Category ($M)										
Development	18.0	18.4	19.4	20.4	17.4	17.4	17.4	17.4	6.4	152.5
Equipment	3.9	3.1	3.2	3.4	3.4	3.4	3.4	3.4	1.2	28.4
Infrastructure	4.9	5.0	5.3	5.6	2.7	2.7	2.7	2.7	1.0	32.4
Total ($M)	26.8	26.5	27.9	29.4	23.5	23.5	23.5	23.5	8.6	213.3

Table 20-1: LOM capital expenditures breakdown for the Holt Mine.

Holloway Mine

The Holloway mine was placed on temporary suspension at the end of 2016. As a result, no life of mine plan and associated costs estimates are presented.

20.2 Operating Costs

20.2.1 Basis for Estimate

Operating costs for units of work that will be carried out by KLG personnel were based on KLG budget figures for 2017.

20.2.2 Cost Estimate

Operating unit cash costs for the Holt Mine average $100/t, based on the 2017 Budget, or $122/t when including royalties. Details are provided in Table 20-2.

Holt Mine	2017 Budget Unit Costs ($/t)
Surface G&A + Operations + Services	$22.96
Operating Development (Direct)	$15.39
Production Geology	$7.89
UG Services & Supervision	$39.84
Equipment Operations	$21.84
Regional + KLN Allocations	$8.50
Indirects Allocated to Capital	($15.79)
Total Operating Cost (w/o royalties)	$100.63
Royalties	$21.64
Total Operating Cost (w/ royalties)	$122.27

Table 20-2: Holt Mine operating unit cost breakdown.

Holloway Mine

The Holloway mine was placed on temporary suspension at the end of 2016. As a result, no life of mine plan and associated costs estimates are presented

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 that influence the mineral resources or the mineral reserves of the Holt or Holloway mines.

There are no adjacent properties that the Holt mine or the Holloway mine relies upon for the operation of the mine and mill complex.

23.0 OTHER RELEVANT DATA AND INFORMATION

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

24.0 INTERPRETATION AND CONCLUSIONS

24.1 General

The general consensus from an exploration perspective is that many of the mineral deposits at the Holt- Holloway property remain open or poorly drill tested along strike and dip and therefore they offer excellent potential for both surface and underground exploration programs. One sign of a robust project or mine is its ability to replenish and grow its mineral resources and mineral reserves. This has been the case at Holt and Holloway since operations were re-started.

This technical report was compiled by KLG employees.

24.2 Opportunities

Opportunities at the Holt and Holloway mine are as follows:

- Significant mineralized Extensions to Zone 4, Worvest, Tousignant and Cascade to the west at Holt, and extensions of the Lightning Deep, and Sediment zone to the east at Holloway;
- Significant increase in mineralized extensions of zone 6, Zone 7, C97, C104 mineral zones. These sub-vertical tabular zones are structurally associated with the Ghostmount Fault zone;
- Discovery of a repetition of any one of the mineralized zones being actively developed at the Holt-Holloway operation;
- A new mineral discovery on the Holt-Holloway property ideally one situated proximal to the Holloway shaft;
- Potential for en-echelon flat mineralized zones similar to Zone 4 either above the present Zone 4 location or at depth;
- Reduction or re-negotiation of the underlying production royalties;
- Increase in production rate by de-bottlenecking the ore flow system at Holt;
- Reduction in capital or operating costs by improving the planning and mining processes via the Company Continuous Improvement Program;

- A higher gold price and lower operating costs could lower the cut-off grade, enhance cash flow and likely increase mineral reserves replacement rate;
- Higher development productivity than budgeted will create more flexibility in the production plan as ore may become available sooner than originally planned;
- Increase of productivity in general could results in additional lower grade ore mining on an incremental basis; and,
- On-going exploration near the mines could result the discovery of new ore zone(s) near the operations and be brought into production quickly with lower capital expenses than another zone located further away from the Company current infrastructure.

24.3 Risks

Risks that could be present at the operation are summarized as follows:

- Future exploration programs are unable to keep pace with mining that in turn results in mineral resources and mineral reserves being depleted;
- Mineral resources may not be converted up to mineral reserves due to a lack of economic support;
- Drop in gold price to a level whereby it becomes uneconomic to continue mining and developing the mine complex;
- Increased costs for skilled labour, power, fuel, reagents, trucking, etc. could lead to an increase the cut-off grade and decrease the level of mineral resources and mineral reserves;
- Mechanical breakdown of critical equipment (hoist, conveyance, mill, etc.) or infrastructure that could decrease or halt the production throughput at the mine;
- Cost pressure on materials required to sustain development and production could impact negatively the profitability of the operations; and,
- Production throughput relies on completing development activities as per the mining plan schedule. If lower development productivity than budgeted are encountered, this will likely affect the production profile of the current mining plan.

25.0 RECOMMENDATIONS

A number of recommendations arising from the Technical Report are found below:

- Advancement of the 1075 level to the west is required to facilitate definition drilling of the Zone 4 western extensions. Creation of underground drill platforms to test for the strike extension of V-93 and down-dip extension of Zone 6 mineralization.

- Work to standardize mine grids (local mine grids Holt-Holloway vs. UTM grids);

- Follow-up on SRK's and Rhys' report recommendations. The key recommendation being the exploration for repetitions of mineral deposits at Holloway;

- It is recommended to continue to develop the Holt mine by continually explore and define any potential zone surrounding the operations. It is believed that the land package near the mines is hosting a number of superior exploration targets, namely at Cascade and Tousignant West.

- The technical team on site should continue to optimize the LOM plan with a view to maximize profitability and minimize potential shortage of mill feed.

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 as identified by a recently completed VTEM heliborne MAG / EM survey, and based on compilations of targets currently in KLG's extensive database.

The 2017 exploration program, at a cost of $4.3M, consists primarily of core drilling, on targets situated to the west of the mine. More than 17% of the 2017 budget is planned for drilling on the Holt and Holloway properties.

The 2017 exploration program plans to utilize two drills in the early part of the year, possibly expanding to three drills depending on productivity.

26.0 REFERENCES

Ayer, J.A., Amelin, Y., Kamo, S.L., Ketchum, J.W.F., Kwok, K. and Trowell, N. 2002: Evolution of the southern Abitibi greenstone belt based on U-Pb chronology: autochthonous volcanic construction followed by plutonism, regional deformation and sedimentation; Precambrian Research, v. 115, pp. 63-95.

Ayer, J.A., Thurston, P.C., Bateman, R., Dube, B., Gibson, H.L., Hamilton, M.A., Hathway, B., Hocker, S.M., Houle, M.G., Hudak, G., Ispolatov, V.O., Lafrance, B., Lesher, C.M., MacDonald, P.J., Peloquin, A.S., Piercy, S.J., Reed, L.E. and Thompson, P.H., 2005: Overview of results from the Greenstone Architecture Project: Discover Abitibi Initiative: OGS, Open File 6154, 146 p.

Ayer, J.A., Trowell, N.F., Amelin, Y. and Corfu, F. 1999: Geological Compilation of the Abitibi Greenstone Belt in Ontario: Toward a revised Stratigraphy Based on Compilation and New Geochronology Results; in Summary of Field Work and Other Activities 1998: OGS MP169, pp. 14-24.

Barrick Gold Corporation, 2002: Information Document “Holt-McDermott Gold Processing Operation”.

Born, P. 1995: A sedimentary basin analysis of the Abitibi greenstone belt in the Timmins area, northern Ontario, Canada; Unpublished Ph. D. Thesis, Carlton University, Ottawa, 489 p.

Cater, D. and Salehi, K.; Holt-Holloway Property, Ontario, Canada. Updated NI 43-101 Technical Report addressed to SAS., March 27, 2015. 244 p.

CANMET (2004), Review of Geomechanical Stope Design at Holloway Mine, May 2004, Proj # 602713, Report MMSL 04-020(CR)

Cook, R.B., Valliant, W.W, and Pearson J.L. (2006): Technical Report on the Holloway-Holt Mining Project, Northeastern Ontario, Canada, NI 43-101 Technical Report prepared for St Andrew Goldfields Ltd., October 2, 2006, 170 p.

Corfu, F., Jackson, S.L., and Sutcliffe, R.H., 1991: U-Pb ages and tectonic significance of late alkalic nonmarine sedimentation: Timiskaming Group, southern Abitibi belt. Canadian Journal of Earth Sciences, vol. 28, pp. 489-503.

Environment Canada, http://www.climate.weatheroffice.gc.ca

Golder Associates (1998): Review Visit to Holt McDermott Mine January 1998, ref 981-1701

Golder Associates (1999): Review Visit to Holt McDermott Mine April 1999, ref 991-1708

Golder Associates (2008): Draft Closure Plan Holloway Complex St Andrew Goldfields LTD. January 2008.

Golder Associates (2008): Draft Report on Conceptual Deposition Plan Southwest and Southeast Basins Tailings Management Facility Holloway Mine, Ontario June 2008 ref 07-1118-0052.

Goldfarb, R.J., Groves, D.I., Gardoll, S. 2001: Orogenic gold and geologic time: a global synthesis: Ore Geology Reviews, vol 18, pp. 1-75.

Heather, K.B. 1998: New insights on the stratigraphy and structural geology of the southwestern Abitibi greenstone belt: Implications for the tectonic evolution and setting of mineral deposits in the Superior Province: in The first age of giant ore formation: stratigraphy, tectonics and mineralization in the Late Archean and Early Proterozoic; Papers presented at the PDAC, pp. 63-101.

Jensen, L.G., 1978: Stoughton and Marriott Townships, District of Cochrane. Ontario Geological Survey, report 173, 72 pages plus map.

Jensen, L.S., and Langford, F.F., 1985: Geology and Petrogenesis of the Archean Abitibi belt in the Kirkland Lake area, Ontario. Ontario Geological Survey, Miscellaneous

Lelièvre J., 2006: Metallurgical Tests on Holloway Ore, Unité de Recherche et de Service en Technologie Minérale (URSTM), January 16, 2006.

Newmont, 2006: Confidential Information Memorandum “Holloway-Holt Mining Camp, Ontario, Canada”, March 2006.

Noranda Technology Centre (1997): Design Guidelines for the Holloway East Zone (Draft), August 1997 Paper 123, 130 p.

Poulsen, K.H., Robert, F., and Dube, B., 2000: Geological classification of Canadian gold deposits; geological Survey of Canada, Bulletin 540, 106 p.

Rhys, D.A., 2005a: Structural study of the Holloway and Holt-McDermott deposits, Ontario, with exploration implications; unpublished report for Newmont Canada Ltd., 79 pages plus appendices.

Rhys, D.A., 2005b: October 2005 Site Visit: observations and implications; unpublished Memo to Newmont Canada Ltd., 15 p.

Rhys, D.A., 2015: Holloway site visit, Oct. 30: geological comments on exploration targeting and target locations. Internal report prepared for St Andrew Goldfields. Dated Nov. 6, 2015.

Robert, F. Syenite Associated disseminated Gold Deposits in the Abitibi Greenstone Belt, Canada 2001.

Ropchan, J.R., Luinstra, B., Fowler, A.D., Benn, K., Ayer, J., Berger, B., Dahn, R. Labine, R. & Amelin, Y., 2002: Host rock and structural controls on the nature and timing of gold mineralization at the Holloway Mine, Abitibi Sub province, Ontario. Economic Geology, 97, pp. 291-309.

Satterly, J., 1949: Geology of Garrison Township. Ontario Department of Mines, Annual report, vol. LVIII, part IV, 31 pages and map.

Satterly, J., 1952: Geology of Harker Township. Ontario Department of Mines, Annual report, vol. LX, part VII, 47 pages and map.

Satterly, J., 1954: Geology of the north half of Holloway Township. Ontario Department of Mines, Annual report, vol. LXII, part VII, 38 pages and map.

SRK Consulting (Canada) Ltd. Regional Structural Geology Interpretation of Aeromagnetic Data, Timmins District, Northern Ontario. Report prepared for St. Andrew Goldfields. November 21, 2011.

St. Andrew Goldfields, 2013 Budget book submission – Internal document Dec, 2012.

W. V. Valliant, R.D. Bergen, SWRPA (2008) Technical Report on the Holloway-Holt Project, Ontario, Canada. NI 43-101 report, prepared for St Andrew Goldfields Ltd. July 2008. 263 pages.

Weather data for Timmins – web reference:

http://www.weather.com/outlook/travel/businesstraveler/wxclimatology/monthly/CAXX0501.

27.0 SIGNATURE PAGE AND DATE

The undersigned prepared this technical report titled “Holt-Holloway 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. 200 Bay Street, Suite 3120 Toronto, Ontario, M5J 2J1 Canada

“signed and sealed”

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

CERTIFICATE OF QUALIFIED PERSON

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

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.

This certificate applies to the technical report entitled “Holt-Holloway Property Updated NI-43-101”, dated effective December 31, 2016 (the “Technical Report”).

I graduated with a Bachelor of Science degree in Earth Sciences 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 Resources and Reserves. Since January 2016, I have been Vice President Exploration responsible for surface exploration activities on the company’s extensive land package.

I am familiar with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (“NI 43-101”) and by reason of education, experience and professional registration I fulfill the requirements of a “qualified person” as defined in NI 43-101.

I last visited the Holt Holloway Mines, subject of the Technical Report, in March 2017.

I am responsible for the Summary and Sections 6 to 11, 13 and 22 to 25 of the Technical Report.

I am not independent of the Issuer as described in section 1.5 of NI 43-101, as I am an employee of the Issuer.

I have prior involvement with the property that is the subject of the Technical Report. I have been frequently involved with the property having overseen exploration activities on the properties since 2012.

I have read NI 43-101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.

At the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 30 day of March, 2017.

“Signed and Sealed”

Douglas Cater P. Geo
Vice President Exploration

Appendix A: Claim list.

HARKER Township						
Claim #	PCL #	Pin#	SR	MR	Size (ha)	Group
529376		UPMC	N	Y	12.77	Canamax 10-39
529377		UPMC	N	Y	15.34	Canamax 10-39
529378		UPMC	N	Y	20.06	Canamax 10-39
529379		UPMC	N	Y	15.38	Canamax 10-39
529380		UPMC	N	Y	12.94	Canamax 10-39
529381		UPMC	N	Y	12.28	Canamax 10-39
586435		UPMC	N	Y	29.07	Canamax 10-39
586436		UPMC	N	Y	10.42	Canamax 10-39
586437		UPMC	N	Y	6.06	Canamax 10-39
586455		UPMC	N	Y	12.20	Canamax 10-39
586456		UPMC	N	Y	18.46	Canamax 10-39
586457		UPMC	N	Y	11.47	Canamax 10-39
586458		UPMC	N	Y	12.60	Canamax 10-39
632511		UPMC	N	Y	10.88	Canamax 10-08
632512		UPMC	N	Y	15.28	Canamax 10-08
632513		UPMC	N	Y	20.07	Canamax 10-08
641387		UPMC	N	Y	11.20	West Block
641388		UPMC	N	Y	6.95	West Block
641389		UPMC	N	Y	8.40	West Block
641390		UPMC	N	Y	6.79	West Block
641391		UPMC	N	Y	19.09	West Block
641392		UPMC	N	Y	19.64	West Block
641393		UPMC	N	Y	19.26	West Block
641394		UPMC	N	Y	19.48	West Block
641395		UPMC	N	Y	18.21	West Block
641396		UPMC	N	Y	18.17	West Block
641397		UPMC	N	Y	18.37	West Block
641398		UPMC	N	Y	17.42	West Block
641399		UPMC	N	Y	19.43	West Block
641400		UPMC	N	Y	22.87	West Block
641401		UPMC	N	Y	21.97	West Block
641402		UPMC	N	Y	21.84	West Block
641403		UPMC	N	Y	19.87	West Block
641404		UPMC	N	Y	19.53	West Block

641405	UPMC	N	Y	20.74	West Block
641406	UPMC	N	Y	16.55	West Block
641410	UPMC	N	Y	10.27	West Block
641411	UPMC	N	Y	6.20	West Block
641412	UPMC	N	Y	6.34	West Block
641413	UPMC	N	Y	15.68	West Block
641516	UPMC	N	Y	19.32	Canamax 10-39a
641517	UPMC	N	Y	16.18	Canamax 10-39a
641518	UPMC	N	Y	27.23	Canamax 10-39a
641524	UPMC	N	Y	12.11	Canamax 10-39a
650690	UPMC	N	Y	15.56	Canamax 10-39a
650691	UPMC	N	Y	18.41	Canamax 10-39a
650692	UPMC	N	Y	17.14	Canamax 10-39a
661901	UPMC	N	Y	9.68	Canamax 10-39b
661902	UPMC	N	Y	18.09	Canamax 10-39
661903	UPMC	N	Y	22.70	Canamax 10-39b
661904	UPMC	N	Y	10.67	Canamax 10-39b
667727	UPMC	N	Y	4.86	Canamax 10-39b
667728	UPMC	N	Y	9.07	Canamax 10-39b
802656	UPMC	N	Y	7.54	West Block
802657	UPMC	N	Y	7.80	West Block
802658	UPMC	N	Y	13.49	West Block
802659	UPMC	N	Y	9.31	West Block
802668	UPMC	N	Y	12.54	West Block
802669	UPMC	N	Y	11.40	West Block
802671	UPMC	N	Y	16.12	West Block
802672	UPMC	N	Y	13.18	West Block
802673	UPMC	N	Y	16.49	West Block
802674	UPMC	N	Y	4.46	West Block
1034617	UPMC	N	Y	7.23	Canamax 10-31
1132678	UPMC	N	Y	13.91	Canamax 10-08
1132679	UPMC	N	Y	20.14	Canamax 10-08
1132680	UPMC	N	Y	16.94	Canamax 10-08
1132681	UPMC	N	Y	16.45	Canamax 10-08
1132682	UPMC	N	Y	16.99	Canamax 10-08
1132683	UPMC	N	Y	15.53	Canamax 10-08
1132684	UPMC	N	Y	18.56	Canamax 10-08
1132685	UPMC	N	Y	14.91	Canamax 10-08

1137349		UPMC	N	Y	13.25	Canamax 10-08
1137369		UPMC	N	Y	17.94	Canamax 10-08
1137389		UPMC	N	Y	14.68	Canamax 10-08
1184131		UPMC	N	Y	69.36	West Block
1201109		UPMC	N	Y	20.26	Canamax 10-31
1201110		UPMC	N	Y	9.34	Canamax 10-31
1206020		UPMC	N	Y	40.42	NYE
1211775		UPMC	N	Y	130.20	NYE
1211776		UPMC	N	Y	225.05	NYE
1211777		UPMC	N	Y	86.18	NYE
1242261		UPMC	N	Y	263.11	NYE
3013893		UPMC	N	Y	84.77	Canamax 10-31
3016950		UPMC	N	Y	90.62	Canamax 10-31
3016967		UPMC	N	Y	9.33	Canamax 10-31
4203533		UPMC	N	Y	26.34	Canamax 10-31
CLM313	1535LC	65376-099	Y	Y	189.13	BG-Newmex
CLM323	1569LC	65376-106	Y	Y	149.37	Holt Mine
CLM373	1635LC	65376-120	Y	Y	140.15	BG-Canamax
CLM374	1730LC	65376-101	Y	Y	79.74	BG-Lenora
CLM390	1730LC	65376-101	Y	Y	154.72	BG-Manville
L10084	4261SEC	65376-161	N	Y	17.43	Holloway Mine
L10085	4261SEC	65376-161	N	Y	16.03	Holloway Mine
L10478	4261SEC	65376-161	N	Y	15.52	Holloway Mine
L10696	4261SEC	65376-161	N	Y	15.26	Holloway Mine
L10735	4261SEC	65376-161	N	Y	16.32	Holloway Mine
L11081	4045SEC	65376-158	Y	Y	13.09	Teddy Bear
L11166	4046SEC	65376-159	Y	Y	11.23	Teddy Bear
L11167	4047SEC	65376-160	Y	Y	8.96	Teddy Bear
L11168	4261SEC	65376-161	N	Y	7.52	Holloway Mine
L11244	4119SEC	65376-104	Y	Y	6.63	Holt Mine
L11245	4120SEC	65376-092	Y	Y	17.57	Holt Mine
L11246	4121SEC	65376-103	Y	Y	15.93	Holt Mine
L11247	4103SEC	65376-093	Y	Y	15.76	Holt Mine
L11248	4104SEC	65376-102	Y	Y	21.37	Holt Mine
L11249	4105SEC	65376-105	Y	Y	21.38	Holt Mine
L11570	4087SEC	65376-117	Y	Y	20.64	Harker Patents
L11571	3970SEC	65376-119	Y	Y	14.88	Harker Patents

L11671	4261SEC	65376-161	N	Y	11.56	Holloway Mine
L11927	4075SEC	65376-118	Y	Y	24.12	Harker Patents
L29745	8315SEC	65376-036	Y	Y	17.07	Lightvale
L29746	8961SEC	65376-035	Y	Y	18.35	Lightvale
L29747	8962SEC	65376-033	Y	Y	24.69	Lightvale
L29748	8963SEC	65376-034	Y	Y	23.92	Lightvale
L29749	8964SEC	65376-048	Y	Y	20.69	Lightvale
L29750	8965SEC	65376-029	Y	Y	18.85	Lightvale
L29751	8316SEC	65376-049	Y	Y	19.99	Lightvale
L29752	8966SEC	65376-028	Y	Y	14.35	Lightvale
L29753	8967SEC	65376-050	Y	Y	9.95	Lightvale
L30150	8960SEC	65376-060	Y	Y	16.59	Lightvale
L30151	8993SEC	65376-059	Y	Y	12.24	Lightvale
L30152	8994SEC	65376-058	Y	Y	13.46	Lightvale
L30153	8979SEC	65376-051	Y	Y	20.45	Lightvale
L30154	8980SEC	65376-021	Y	Y	23.09	Lightvale
L30155	8981SEC	65376-022	Y	Y	26.30	Lightvale
L30278	8989SEC	65376-020	Y	Y	17.19	Lightvale
L30279	8990SEC	65376-052	Y	Y	15.23	Lightvale
L30280	8991SEC	65376-057	Y	Y	15.42	Lightvale
L32635	8984SEC	65376-097	Y	Y	10.43	Lightvale
L32636	8985SEC	65376-098	Y	Y	19.68	Lightvale
L32637	8986SEC	65376-076	Y	Y	16.77	Lightvale
L32638	8992SEC	65376-073	Y	Y	17.31	Lightvale
L32639	8995SEC	65376-074	Y	Y	25.36	Lightvale
L32640	8996SEC	65376-075	Y	Y	13.94	Lightvale
L32641	8982SEC	65376-081	Y	Y	17.67	Lightvale
L32642	8983SEC	65376-082	Y	Y	15.20	Lightvale
L32643	8987SEC	65376-096	Y	Y	13.38	Lightvale
L32726	8997SEC	65376-083	Y	Y	11.94	Lightvale
L32727	8988SEC	65376-084	Y	Y	8.84	Lightvale
L32728	8998SEC	65376-095	Y	Y	9.57	Lightvale
L32729	8999SEC	65376-053	Y	Y	17.32	Lightvale
L32730	9000SEC	65376-056	Y	Y	20.55	Lightvale
L32731	9201SEC	65376-077	Y	Y	25.87	Lightvale
L34845	8968SEC	65376-013	Y	Y	19.03	Lightvale
L34846	8969SEC	65376-011	Y	Y	24.16	Lightvale
L34847	8970SEC	65376-054	Y	Y	21.34	Lightvale

L34848	8971SEC	65376-055	Y	Y	27.09	Lightvale
L34849	8972SEC	65376-078	Y	Y	38.92	Lightvale
L34850	8973SEC	65376-079	Y	Y	14.10	Lightvale
L34851	8974SEC	65376-080	Y	Y	11.78	Lightvale
L40536	11327SEC	65376-017	Y	Y	17.43	Lightvale
L40537	11328SEC	65376-024	Y	Y	20.43	Lightvale
L40538	11329SEC	65376-025	Y	Y	13.73	Lightvale
L40539	11330SEC	65376-032	Y	Y	12.69	Lightvale
L40540	11331SEC	65376-018	Y	Y	20.09	Lightvale
L40541	11332SEC	65376-023	Y	Y	15.59	Lightvale
L40542	11333SEC	65376-026	Y	Y	15.98	Lightvale
L40543	11334SEC	65376-030	Y	Y	10.68	Lightvale
L40544	11335SEC	65376-019	Y	Y	17.63	Lightvale
L40545	11336SEC	65376-027	Y	Y	17.15	Lightvale
L40546	11337SEC	65376-031	Y	Y	13.63	Lightvale
L43925	11338SEC	65376-014	Y	Y	6.78	Lightvale
L43926	11339SEC	65376-010	Y	Y	14.75	Lightvale
L43927	11340SEC	65376-007	Y	Y	20.77	Lightvale
L43928	11341SEC	65376-015	Y	Y	15.03	Lightvale
L43929	11342SEC	65376-009	Y	Y	13.67	Lightvale
L43930	11343SEC	65376-006	Y	Y	20.70	Lightvale
L43931	11344SEC	65376-016	Y	Y	17.99	Lightvale
L43932	11345SEC	65376-008	Y	Y	17.26	Lightvale
L43933	11346SEC	65376-005	Y	Y	16.12	Lightvale
L525486	1601LC	65376-151	Y	Y	33.84	Canamax 10-08
L525487	1601LC	65376-151	Y	Y	24.56	Canamax 10-08
L525488	1601LC	65376-151	Y	Y	18.77	Canamax 10-08
L525489	1601LC	65376-151	Y	Y	26.57	Canamax 10-08
L528967	1851LC	65376-154	N	Y	18.52	Canamax 10-31
L528968	1851LC	65376-154	N	Y	18.63	Canamax 10-31
L528969	1851LC	65376-154	N	Y	19.66	Canamax 10-31
L528970	1851LC	65376-154	N	Y	18.11	Canamax 10-31
L528971	1851LC	65376-154	N	Y	16.49	Canamax 10-31
L528972	1851LC	65376-154	N	Y	17.92	Canamax 10-31
L529369	1601LC	65376-151	Y	Y	14.95	Canamax 10-39
L529370	1601LC	65376-151	Y	Y	11.47	Canamax 10-39
L529371	1601LC	65376-151	Y	Y	24.36	Canamax 10-39

L529372	1601LC	65376-151	Y	Y	16.01	Canamax 10-39
L529373	1601LC	65376-151	Y	Y	22.82	Canamax 10-39
L529375	1601LC	65376-151	Y	Y	14.13	Canamax 10-39
L586459	1601LC	65376-151	Y	Y	9.32	Canamax 10-39
L586460	1601LC	65376-151	Y	Y	20.21	Canamax 10-39
L586465	1601LC	65376-151	Y	Y	12.16	Canamax 10-39
L586466	1601LC	65376-151	Y	Y	8.09	Canamax 10-39
L586467	1601LC	65376-151	Y	Y	15.42	Canamax 10-39
L586468	1601LC	65376-151	Y	Y	14.74	Canamax 10-39
L628520	1534LC	65376-111	Y	Y	8.27	Barrick East
L628533	1534LC	65376-111	Y	Y	10.87	Barrick East
L628534	1534LC	65376-111	Y	Y	15.85	Barrick East
L633298	1534LC	65376-112	Y	Y	8.20	Barrick East
L633299	1534LC	65376-112	Y	Y	11.17	Barrick East
L633300	1534LC	65376-111	Y	Y	5.02	Barrick East
L633301	1534LC	65376-111	Y	Y	3.39	Barrick East
L633303	1534LC	65376-111	Y	Y	4.04	Barrick East
L633305	1534LC	65376-111	Y	Y	11.93	Barrick East
L633306	1534LC	65376-111	Y	Y	5.63	Barrick East
L633308	1534LC	65376-111	Y	Y	18.19	Barrick East
L633309	1534LC	65376-111	Y	Y	15.39	Barrick East
L633310	1534LC	65376-111	Y	Y	12.73	Barrick East
L633311	1534LC	65376-111	Y	Y	8.09	Barrick East
L70976	205LC	65377-063	Y	Y	21.33	Canamax 13-23
L70977	206LC	65377-062	Y	Y	15.24	Canamax 13-23
L70978	207LC	65376-003	Y	Y	13.65	Canamax 13-23
L70979	208LC	65376-004	Y	Y	16.35	Canamax 13-23
L802663	1534LC	65376-111	Y	Y	2.91	Barrick East
L802666	1534LC	65376-111	Y	Y	6.19	Barrick East
L802667	1534LC	65376-111	Y	Y	3.88	Barrick East
L9862	3917SEC	65376-043	Y	Y	15.86	Holloway Mine

HOLLOWAY					
586632	UPMC	N	Y	13.01	Canamax 10-42
588014	UPMC	N	Y	15.05	FN-Holloway 3
588165	UPMC	N	Y	13.14	FN-Holloway 3
588169	UPMC	N	Y	14.34	FN-Holloway 3
588170	UPMC	N	Y	15.25	FN-Holloway 3
588171	UPMC	N	Y	15.83	FN-Holloway 3
588172	UPMC	N	Y	16.16	FN-Holloway 3
588175	UPMC	N	Y	14.21	FN-Holloway 3
588176	UPMC	N	Y	15.61	FN-Holloway 3
588177	UPMC	N	Y	17.27	FN-Holloway 3
588178	UPMC	N	Y	16.03	FN-Holloway 3
588179	UPMC	N	Y	16.75	FN-Holloway 3
588182	UPMC	N	Y	14.52	FN-Holloway 3
588183	UPMC	N	Y	15.48	FN-Holloway 3
588184	UPMC	N	Y	17.10	FN-Holloway 3
588185	UPMC	N	Y	15.85	FN-Holloway 3
588186	UPMC	N	Y	16.93	FN-Holloway 3
588187	UPMC	N	Y	14.41	FN-Holloway 3
588188	UPMC	N	Y	15.35	FN-Holloway 3
588189	UPMC	N	Y	16.79	FN-Holloway 3
588190	UPMC	N	Y	15.81	FN-Holloway 3
588191	UPMC	N	Y	16.93	FN-Holloway 3
588192	UPMC	N	Y	15.61	FN-Holloway 3
588193	UPMC	N	Y	16.73	FN-Holloway 3
588194	UPMC	N	Y	18.42	FN-Holloway 3
588195	UPMC	N	Y	17.80	FN-Holloway 3
588196	UPMC	N	Y	18.71	FN-Holloway 3
588197	UPMC	N	Y	16.08	FN-Holloway 3
588198	UPMC	N	Y	16.95	FN-Holloway 3
588388	UPMC	N	Y	10.90	FN-Holloway 2
588389	UPMC	N	Y	15.27	FN-Holloway 2
588468	UPMC	N	Y	16.21	FN-Holloway 2
588469	UPMC	N	Y	12.48	FN-Holloway 2
588470	UPMC	N	Y	14.60	FN-Holloway 2
588471	UPMC	N	Y	17.71	FN-Holloway 2
588476	UPMC	N	Y	15.88	FN-Holloway 2
588477	UPMC	N	Y	10.96	FN-Holloway 2

588540	UPMC	N	Y	11.12	FN-Polishing Pond
588558	UPMC	N	Y	16.39	FN-Holloway 3
588559	UPMC	N	Y	15.68	FN-Holloway 3
588560	UPMC	N	Y	14.05	FN-Holloway 3
588563	UPMC	N	Y	24.61	FN-Holloway 3
588564	UPMC	N	Y	16.63	FN-Holloway 3
588565	UPMC	N	Y	17.03	FN-Holloway 3
588566	UPMC	N	Y	16.14	FN-Holloway 3
588567	UPMC	N	Y	17.06	FN-Holloway 3
588568	UPMC	N	Y	17.81	FN-Holloway 3
588569	UPMC	N	Y	17.56	FN-Holloway 3
588570	UPMC	N	Y	25.47	FN-Holloway 3
588573	UPMC	N	Y	16.78	FN-Holloway 3
588574	UPMC	N	Y	15.49	FN-Holloway 3
588575	UPMC	N	Y	17.12	FN-Holloway 3
596245	UPMC	N	Y	14.37	Canamax 10-42
596246	UPMC	N	Y	15.28	Canamax 10-42
596251	UPMC	N	Y	12.95	Canamax 10-42
596252	UPMC	N	Y	9.90	Canamax 10-42
596253	UPMC	N	Y	9.31	Canamax 10-42
596254	UPMC	N	Y	8.26	Canamax 10-42
596255	UPMC	N	Y	16.22	Canamax 10-42
596256	UPMC	N	Y	8.90	Canamax 10-42
596257	UPMC	N	Y	8.77	Canamax 10-42
599010	UPMC	N	Y	16.46	FN-Holloway 3
599011	UPMC	N	Y	15.27	FN-Holloway 3
599012	UPMC	N	Y	16.02	FN-Holloway 3
599013	UPMC	N	Y	17.58	FN-Holloway 3
599014	UPMC	N	Y	25.48	FN-Holloway 3
599020	UPMC	N	Y	22.09	FN-Holloway 3
599021	UPMC	N	Y	15.96	FN-Holloway 3
599022	UPMC	N	Y	15.86	FN-Holloway 3
599023	UPMC	N	Y	15.09	FN-Holloway 3
599024	UPMC	N	Y	13.21	FN-Holloway 3
599025	UPMC	N	Y	20.41	FN-Holloway 3
632507	UPMC	N	Y	20.71	Canamax 10-42
632508	UPMC	N	Y	7.94	Canamax 10-42

632509		UPMC	N	Y	8.05	Canamax 10-42
632510		UPMC	N	Y	8.10	Canamax 10-42
632515		UPMC	N	Y	38.79	Canamax 10-42
632516		UPMC	N	Y	11.85	Canamax 10-42
632517		UPMC	N	Y	14.87	Canamax 10-42
632518		UPMC	N	Y	15.79	Canamax 10-42
632519		UPMC	N	Y	18.97	Canamax 10-42
632520		UPMC	N	Y	15.18	Canamax 10-42
632818		UPMC	N	Y	15.89	Canamax 10-42
632819		UPMC	N	Y	15.51	Canamax 10-42
632821		UPMC	N	Y	15.80	Canamax 10-42
632822		UPMC	N	Y	8.17	Canamax 10-42
632823		UPMC	N	Y	18.43	Canamax 10-42
632824		UPMC	N	Y	20.30	Canamax 10-42
632825		UPMC	N	Y	27.67	Canamax 10-42
667156		UPMC	N	Y	15.46	Canamax 10-47
667157		UPMC	N	Y	15.66	Canamax 10-47
667158		UPMC	N	Y	13.35	Canamax 10-47
678846		UPMC	N	Y	18.73	Canamax 10-47
678847		UPMC	N	Y	15.09	Canamax 10-47
678848		UPMC	N	Y	15.11	Canamax 10-47
678849		UPMC	N	Y	15.39	Canamax 10-47
678850		UPMC	N	Y	13.50	Canamax 10-47
1111610		UPMC	N	Y	17.70	Canamax 10-25
1116486		UPMC	N	Y	12.73	Canamax 10-25
1137350		UPMC	N	Y	11.61	Canamax 10-25
1137360		UPMC	N	Y	13.87	Canamax 10-25
1137370		UPMC	N	Y	14.62	Canamax 10-25
4207023		UPMC	N	Y	2.22	Holloway Wedge
CLM321	1570LC	65375-086	Y	Y	344.46	FN-Holloway 3
CLM322	1578LC	65375-085	Y	Y	363.41	Holt Mine
CLM323	1569LC	65376-106	Y	Y	218.29	Holt Mine
CLM345	1626LC	65375-092	Y	Y	75.74	Holt Mine
CLM346	1626LC	65375-092	Y	Y	271.76	Holt Mine
CLM351	1634LC	65375-107	Y	Y	153.42	PGC 2
L10080	17179SEC	65376-178	Y	N	8.81	Holloway Mine
L10080	4261SEC	65376-161	Y	Y	8.81	Holloway Mine

L10081	17182SEC	65376-181	Y	N	14.45	Holloway Mine
L10081	4261SEC	65376-161	Y	Y	14.45	Holloway Mine
L10082	17172SEC	65376-175	Y	N	21.72	Holloway Mine
L10082	4261SEC	65376-161	N	Y	21.72	Holloway Mine
L10083	17171SEC	65376-174	Y	N	14.19	Holloway Mine
L10083	4261SEC	65376-161	Y	Y	14.19	Holloway Mine
L10218	21000SEC	65375-090	Y	N	23.54	Holt Mine
L10219	21001SEC	65375-089	Y	N	19.03	Holt Mine
L10220	21002SEC	65375-087	Y	N	16.25	Holt Mine
L10220A	21002SEC	65375-087	Y	Y	13.95	Holt Mine
L10221	21003SEC	65375-080	Y	N	16.48	Holt Mine
L10221A	21003SEC	65375-080	Y	Y	14.57	Holt Mine
L10222	21004SEC	65375-079	Y	N	22.43	Holt Mine
L10476	3972SEC	65375-008	Y	Y	17.56	Holloway Mine
L10477	3971SEC	65375-009	Y	Y	16.11	Holloway Mine
L10534	3991SEC	65375-082	Y	Y	16.51	Holloway Mine
L10697	17180SEC	65376-179	Y	N	16.42	Holloway Mine
L10697	4261SEC	65376-161	Y	Y	16.42	Holloway Mine
L10698	3990SEC	65375-056	Y	Y	15.22	Holloway Mine
L10699	3989SEC	65375-054	Y	Y	9.47	Holloway Mine
L10904	4261SEC	65375-001	N	Y	6.34	Holloway Mine
L11009	8168SEC	65375-071	Y	Y	8.38	Holt Mine
L11010	8164SEC	65375-072	Y	Y	5.71	Holt Mine
L11011	8167SEC	65375-074	Y	Y	6.11	Holt Mine
L11012	8165SEC	65375-075	Y	Y	8.28	Holt Mine
L11087	4069SEC	65375-067	Y	Y	22.57	Holt Mine
L11160	3988SEC	65375-055	Y	Y	12.35	Holloway Mine
L11169	4261SEC	65376-161	Y	Y	11.03	Holloway Mine
L11170	4261SEC	65376-161	Y	Y	12.92	Holloway Mine
L11171	4261SEC	65376-161	Y	Y	16.34	Holloway Mine
L11312	4411SEC	65375-060	Y	Y	9.12	Holt Mine
L11313	4412SEC	65375-073	Y	Y	8.78	Holt Mine
L11314	4413SEC	65375-077	Y	Y	15.82	Holt Mine
L11315	4421SEC	65375-076	Y	Y	11.70	Holt Mine
L11316	4422SEC	65375-078	Y	Y	13.85	Holt Mine
L11381	4106SEC	65375-070	Y	Y	10.27	Holt Mine
L11382	4107SEC	65375-069	Y	Y	8.38	Holt Mine

L11383	4108SEC	65375-068	Y	Y	9.24	Holt Mine
L11417	4109SEC	65375-058	Y	Y	16.51	Holt Mine
L11418	4110SEC	65375-057	Y	Y	7.78	Holt Mine
L11535	4112SEC	65375-063	Y	Y	10.64	Holt Mine
L11548	4111SEC	65375-062	Y	Y	9.38	Holt Mine
L11614	4113SEC	65375-059	Y	Y	9.04	Holt Mine
L1213841	12731LC	65375-120	Y	Y	24.53	Holt Mine
L12314	8166SEC	65375-061	Y	Y	7.75	Holt Mine
L13137	4194SEC	65375-066	Y	Y	12.37	Holt Mine
L13997	21005SEC	65375-091	Y	N	23.46	Holt Mine
L13998	21006SEC	65375-088	Y	N	30.84	Holt Mine
L13999	21007SEC	65375-081	Y	N	23.98	Holt Mine
L27220	17532SEC	65375-004	Y	N	16.33	Holloway Mine
L27221	17529SEC	65375-002	Y	N	10.94	Holloway Mine
L27222	17530SEC	65375-003	Y	N	16.53	Holloway Mine
L27223	17531SEC	65375-005	Y	N	17.50	Holloway Mine
L36699	8305SEC	65375-065	Y	Y	8.21	Holt Mine
L43058	11395SEC	65375-036	Y	Y	21.51	Canamax 10-46c
L43061	11396SEC	65375-035	Y	Y	17.15	Canamax 10-46c
L43062	11397SEC	65375-034	Y	Y	19.39	Canamax 10-46c
L43067	11399SEC	65375-032	Y	Y	24.48	Canamax 10-46c
L43068	11398SEC	65375-033	Y	Y	21.21	Canamax 10-46c
L43072	11400SEC	65375-030	Y	Y	19.84	Canamax 10-46c
L43073	11501SEC	65375-029	Y	Y	15.15	Canamax 10-46c
L43076	11383SEC	65375-031	Y	Y	21.17	Canamax 10-46c
L43077	11502SEC	65375-026	Y	Y	23.48	Canamax 10-46c
L43078	11503SEC	65375-027	Y	Y	24.75	Canamax 10-46c
L43079	11504SEC	65375-028	Y	Y	15.05	Canamax 10-46c
L43921	23703SEC	65375-011	Y	Y	9.37	Holloway Mine
L43922	23703SEC	65375-011	Y	Y	7.18	Holloway Mine
L43923	23703SEC	65375-011	Y	Y	11.40	Holloway Mine
L579576	1520LC	65375-025	Y	Y	14.46	Canamax 10-45
L579577	1508LC	65375-104	Y	Y	15.68	Canamax 10-45
L579586	1508LC	65375-104	Y	Y	15.48	Canamax 10-45
L579587	1508LC	65375-104	Y	Y	19.35	Canamax 10-45
L579588	1508LC	65375-104	Y	Y	15.53	Canamax 10-45
L579589	1508LC	65375-104	Y	Y	16.63	Canamax 10-45

L579590	1508LC	65375-104	Y	Y	16.87	Canamax 10-45
L579591	1508LC	65375-104	Y	Y	16.95	Canamax 10-45
L579592	1508LC	65375-104	Y	Y	12.56	Canamax 10-45
L579593	1508LC	65375-104	Y	Y	12.28	Canamax 10-45
L579594	1508LC	65375-104	Y	Y	17.77	Canamax 10-45
L579595	1508LC	65375-104	Y	Y	29.57	Canamax 10-45
L579654	1519LC	65375-022	Y	Y	3.05	Canamax 10-42
L579654	1519LC	65375-022	N	Y	15.66	Canamax 10-42
L579655	1519LC	65375-022	N	Y	14.02	Canamax 10-42
L579656	1519LC	65375-022	N	Y	17.19	Canamax 10-42
L579657	1519LC	65375-022	N	Y	22.96	Canamax 10-42
L579658	1519LC	65375-022	N	Y	11.25	Canamax 10-42
L579659	1519LC	65375-022	N	Y	11.43	Canamax 10-42
L579660	1519LC	65375-022	N	Y	21.60	Canamax 10-42
L579661	1519LC	65375-022	N	Y	14.05	Canamax 10-42
L579662	1519LC	65375-022	N	Y	14.46	Canamax 10-42
L579663	1519LC	65375-022	Y	Y	4.01	Canamax 10-42
L579663	1519LC	65375-022	N	Y	17.67	Canamax 10-42
L579664	1519LC	65375-022	Y	Y	1.51	Canamax 10-42
L579664	1519LC	65375-022	N	Y	13.80	Canamax 10-42
L579665	1519LC	65375-022	N	Y	13.55	Canamax 10-42
L579666	1519LC	65375-022	N	Y	13.63	Canamax 10-42
L579667	1519LC	65375-022	N	Y	23.14	Canamax 10-42
L579668	1519LC	65375-022	N	Y	13.96	Canamax 10-42
L579669	1518LC	65375-084	Y	Y	17.70	Holt Mine
L579670	1518LC	65375-084	Y	Y	24.90	Holt Mine
L579671	1519LC	65375-022	N	Y	15.02	Canamax 10-42
L579672	1519LC	65375-022	N	Y	15.47	Canamax 10-42
L579673	1519LC	65375-022	N	Y	14.47	Canamax 10-42
L588478	12731LC	65375-120	Y	Y	24.97	Holt Mine
L588479	12731LC	65375-120	Y	Y	28.59	Holt Mine
L588534	12731LC	65375-120	Y	Y	16.04	Holt Mine
L588535	12731LC	65375-120	Y	Y	12.20	Holt Mine
L588536	12731LC	65375-120	Y	Y	20.88	Holt Mine
L588537	12731LC	65375-120	Y	Y	18.26	Holt Mine
L588571	1574LC	65375-095	Y	Y	2.34	FN-Holloway 3
L588572	1574LC	65375-095	Y	Y	3.02	FN-Holloway 3

L596247	1547LC	65375-106	N	Y	25.25	Holt Mine
L596248	1518LC	65375-084	Y	Y	16.43	Holt Mine
L596249	1518LC	65375-084	Y	Y	16.45	Holt Mine
L596250	1547LC	65375-106	N	Y	21.89	Holt Mine
L596258			N	Y	17.50	Holloway Mine
L596259			N	Y	16.33	Holloway Mine
L596260			N	Y	16.53	Holloway Mine
L596261			N	Y	10.94	Holloway Mine
L599015	1574LC	65375-095	Y	Y	14.55	FN-Holloway 3
L599016	1574LC	65375-095	Y	Y	2.88	FN-Holloway 3
L599018	1574LC	65375-095	Y	Y	7.52	FN-Holloway 3
L599019	1574LC	65375-095	Y	Y	16.45	FN-Holloway 3
L616488	1505LC	65375-083	Y	Y	24.02	Holt Mine
L616489	1505LC	65375-083	Y	Y	8.66	Holt Mine
L628048	1520LC	65375-025	Y	Y	22.88	Canamax 10-42
L628049	1508LC	65375-104	Y	Y	29.38	Canamax 10-42
L628463	1543LC	65375-017	Y	Y	16.17	Canamax 10-42
L632501	1543LC	65375-017	Y	Y	10.17	Canamax 10-42
L632502	1543LC	65375-017	Y	Y	12.66	Canamax 10-42
L632503	1543LC	65375-017	Y	Y	19.59	Canamax 10-42
L632504	1543LC	65375-017	Y	Y	21.68	Canamax 10-42
L632505	1543LC	65375-017	Y	Y	18.62	Canamax 10-42
L632506	1543LC	65375-017	Y	Y	31.69	Canamax 10-42
L632820	1544LC	65375-016	Y	Y	15.92	Canamax 10-42
L632826	1543LC	65375-017	Y	Y	17.74	Canamax 10-42
L632827	1543LC	65375-017	Y	Y	11.76	Canamax 10-42
L632828	1543LC	65375-017	Y	Y	5.35	Canamax 10-42
L632829	1543LC	65375-017	Y	Y	12.45	Canamax 10-42
L633296	1534LC	65376-112	Y	Y	2.67	Barrick East
L633297	1534LC	65376-112	Y	Y	4.42	Barrick East
L7135	2795SEC	65375-098	Y	Y	27.72	Holt Mine
L7219	2799SEC	65375-099	Y	Y	18.06	Holt Mine
L7220	2796SEC	65375-097	Y	Y	16.29	Holt Mine
L7221	2800SEC	65375-096	Y	Y	19.91	Holt Mine
L7241	3201SEC	65375-101	Y	Y	28.27	Holt Mine
L7242	3202SEC	65375-102	Y	Y	22.25	Holt Mine
L7246	3203SEC	65375-103	Y	Y	20.17	Holt Mine

L7248	3204SEC	65375-100	Y	Y	19.50	Holt Mine
L799696	1540LC	65375-105	Y	Y	17.45	FN-Holloway 3
L799697	1540LC	65375-105	Y	Y	17.73	FN-Holloway 3
L801063	1505LC	65375-083	Y	Y	8.81	Holt Mine
L801065	1505LC	65375-083	Y	Y	4.92	Holt Mine
L802768	1505LC	65375-083	Y	Y	3.49	Holt Mine
L8246	3752SEC	65375-010	Y	Y	7.95	Holloway Mine
L8247	3752SEC	65375-010	Y	Y	12.29	Holloway Mine
L9863	3918SEC	65375-006	Y	Y	8.78	Holloway Mine
L9864	3919SEC	65375-007	Y	Y	10.04	Holloway Mine

UPMC= Unpatented Mining Claim(staked claim)
LC= Lease Cochrane
SEC= South East Cochrane