Technical Report

on the

Mineral Properties of Queenston Mining Inc.

in the

Kirkland Lake Gold Camp



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Appendix A: Property and Claim List

SUMMARY:

Queenston Mining's Kirkland Lake Project (gold) consists of a large block of claims within the Kirkland Lake gold camp. The camp is located in northeastern Ontario, some 600 km north of Toronto. It encompasses five townships from the Town of Kirkland Lake, in Teck Township, to the Quebec border. On July 19, 2002, Queenston Mining Inc. purchased Newmont Mining Corporation of Canada Ltd's (formerly Franco-Nevada Mining Corporation) 50% interest in the Kirkland Lake Project and embarked on an exploration program. That program, to the end of 2006 is the subject of this report.

The Kirkland Lake Project is large in area, covering some 878 mining claims in the historic gold camp. The project is subdivided into seventeen individual properties, twelve of which were actively explored during the period. The most ambitious efforts include the Anoki-McBean property (61 drillholes) and the Upper Beaver property with 74 drillholes. Exploration on the Anoki-McBean property led to the discovery of the Anoki South Zone, while results on the Upper Beaver property have led to a phase of mineral resource definition drilling in 2007.

Geologically, the Kirkland Lake gold camp is defined by a five-kilometer corridor around the Cadillac–Larder Lake Break from Kirkland Lake to the Quebec border. This major regional structure extends from west of Matachewan in northeastern Ontario past Val d'Or, Quebec, a distance of some 250 km. It has juxtaposed mafic and ultramafic rocks of the Tisdale assemblage against much younger alkalic volcanics and sediments of the Timiskaming assemblage in the Kirkland Lake area.

The camp extends for some 50 km across five townships, from Teck Township in the west, through Lebel, Gauthier and McVittie to McGarry Township in the east at the Ontario / Quebec border. It has yielded roughly 37 million oz of gold over the last century. In Kirkland Lake, seven mines have produced in excess of 24 million oz of gold in Timiskaming assemblage rocks related to the Kirkland Lake Main Break, a structure subparallel to the Cadillac–Larder Lake Break. East of Kirkland Lake, the Kerr Addison mine has produced more than 10 million ounces of gold from Tisdale assemblage rocks along the Cadillac-Larder Lake Break. The balance of past production is spread across the remaining three townships (Lebel, Gauthier and McVittie), of which the Upper Canada deposit (a Queenston asset) was the largest producer at 1.52 million oz.

Past production on the Queenston properties has occurred from both Tisdale and Timiskaming assemblage rocks. Between 1983 and 1987, the McBean open pit produced 48,513 oz of gold from 505,866 t, yielding an average grade of 2.98 g/t in Tisdale assemblage rocks (Roscoe,

Postle Associates, 1996). Roscoe, Postle Associates (RPA) also note some 24,494 t of underground development material grading 3.98 g/t were extracted from the nearby Anoki deposit in 1987-88 (RPA, 2004). Production of 31,089 oz gold from 94,011 t (average grade 10.29 g/t) from the Crescent deposit and the Golden Gate mine between 1910 and 1947 (RPA, 1996), also occurred in Tisdale assemblage rocks. Production from Timiskaming assemblage rocks is recorded from the Upper Canada deposit between 1938 and 1972 as 1.52 million oz from 4,294,873 t representing an average grade of 11.0 g/t, and, from the Sylvanite deposit 1.68 million oz from 4,580,786 t at an average grade of 11.4 g/t between 1927 and 1961 (Roscoe, Postle Associates, 1996). The Upper Beaver deposit, in the northeast part of the project area, is separated from the main body of claims. It is a gold-copper deposit occurring in Lower Blake River assemblage rocks with past production of 140,709 oz of gold and 5423 t of copper from 526,678 t milled between 1913 and 1972, grading 8.31 g/t gold and 1.03% copper (Lovell, H.L. et al, 1979).

There is no present production on the Queenston lands.

Mineral resources on the Queenston properties are a mix of historic data that date prior to NI 43-101, and, more recently calculated data. The historic resources are summarized as:

Deposit	Measured + Indicated	Inferred Resources
	Resources	
Upper Canada	1,899,973 t @ 6.87 g/t (1)	-
McBean	835,518 t @ 5.14 g/t (1)	723,934 t @ 4.57 g/t (1)
		1,111,303 @ 7.51 g/t (2)
Amalgamated Kirkland		2,639,338 t @ 4.46 g/t (2)
180 East	326,587 t @ 4.11 g/t (1)	
TOTAL	3,062,078 t @ 6.10 g/t	4,474,575 t @ 5.24 g/t

Historic calculations via RPA 1996 (1); Queenston Mining 1997 (2). A historic resource on the Upper Beaver property of 200,000 t grading 7.9 g/t was not able to be confirmed from the current data available, and, is not included in the table.

Deposit	Measured + Indicated	Inferred Resources
	Resources	
Anoki Main	522,300 t @ 5.70 g/t	35,800 t @ 5.69 g/t
Anoki South		106,000 t @ 6.48 g/t
TOTAL	522,300 t @ 5.70 g/t	141,800 t @ 6.28 g/t

Current Mineral Resources after RPA (2004) include:

The 2002-06 exploration program was directed towards both Tisdale and Timiskaming assemblage rocks along the Cadillac-Larder Lake Break corridor, and, Tisdale and Lower Blake River assemblage rocks on the Upper Beaver property. The program tested a number of geological environments, discovered a new resource (the Anoki South Zone), and, began the process of defining a deposit on the Upper Beaver property. Exploration targets were Archean lode gold deposits of which the Kirkland Lake Main Break and Kerr Addison type mineralization are primary examples in the Kirkland Lake camp. On a local scale, the target is often tempered by exploring preferred structures that intersect preferred parts of the stratigraphy.

Recent discoveries in the camp via Kirkland Lake Gold (2007), indicate the presence of mineralized cross structures near perpendicular to the historically mined regional features. A 3D computer modelling program initiated by Queenston in 2005, is planned to assist in the definition of these structures and help generate future exploration targets. Cross structures are most relevant to properties near the new discoveries as the Amalgamated Kirkland, Kirkland Lake West and Gracie West properties. The modelling, however, is also useful on a number of other deposits where subtle relationships between alteration, mineralization, stratigraphy and structure can be more fully examined in three dimensions. Modelling is underway on the Anoki, McBean, Upper Canada, Amalgamated Kirkland and Upper Beaver deposits, and, is recommended on the Golden Gate, Pawnee and 180 East mineralization.

Updating of historic resouces to NI 43-101 standards is also a priority. The updating effort is recommended to continue either supplemented by additional diamond drilling as on the McBean deposit, or, by a thorough review of the parameters used on the other historic calculations as the Amalgamated Kirkland, 180 East, McBean and Upper Canada deposits. The NI 43-101 compliant resource calculations (Anoki Main and Anoki South) also require revisiting given the time dependent costs of production and price of gold used.

1.0 INTRODUCTION AND TERMS OF REFERENCE:

Queenston Mining Inc. (Queenston) controls a large land package of 878 patented, leased and unpatented mineral claims in the historic Kirkland Lake gold camp. The package is subdivided into 17 separate properties that form the Kirkland Lake Project. In July, 2002, Queenston purchased Newmont Mining Corporation of Canada Ltd's (formerly Franco-Nevada Mining Corporation) 50% interest in 707 of the mineral claims that had formed a 50:50 joint venture between Queenston and Franco-Nevada from 1996 to 2002.

This Technical Report is prepared for Queenston Mining Inc. as a review and summary of exploration from July, 2002 to December 31, 2006. Special reference is given to the historic exploration results between 1996 and 2002 during the Queenston – Franco-Nevada joint venture, given that Queenston acted as operator. The report is designed to update the geological database and review current targets as Queenston proceeds with a program of continued exploration, 3D computer modelling and upgrading of historic mineral resources to National Instrument (NI) 43-101 standards.

On July 19, 1996, Roscoe-Postle Associates Inc. (RPA) completed an independent technical report on the Kirkland Lake Project for Queenston Mining Inc. This report is used as a point of departure for reviews of past exploration and resources. Subsequent to the 1996 RPA report, sources of information include Annual Reports for the Queenston – Franco-Nevada Kirkland Lake Joint Venture, Queenston in-house and assessment reports, Annual Information Forms, website data for some adjacent properties, and, a further Technical Report by RPA on the Mineral Resources of the Anoki Deposit dated March 31, 2004. Government publications were also utilized to overview the regional geology and confirm property histories.

As exploration manager from April 1996 to May 2006, the author is intimately familiar with the database. Several personal inspections were also made between April and June 2007, to review more recent data and confer with project leaders – C. E. Page, P. Geo (President and CEO); W. R. Benham, P. Geo (Chief Geologist); M. Leblanc, P. Geo (Exploration Manager), and; F. R. Ploeger, P. Geo (Senior Geologist). The report is prepared in accordance with NI 43-101 standards.

2.0 PROJECT DESCRIPTION AND LOCATION OVERVIEW:

Queenston Mining Inc.'s Kirkland Lake Project is located in the Kirkland Lake Gold Camp within the central part of the Abitibi Greenstone Belt. The project is some 600 kilometers (km) north of Toronto in northeastern Ontario. Kirkland Lake (population 8248) is the largest municipality in the immediate area. Other communities (from west to east) include Swastika, King Kirkland, Dobie, Larder Lake, and Virginiatown.

The Kirkland Lake Gold Camp extends for some 50 km across 5 townships, from Teck Township in the west, through Lebel, Gauthier and McVittie to McGarry Township in the east at the Ontario / Quebec border. Teck Township, host to most of the Kirkland Lake mines, forms the boundaries of the municipality of Kirkland Lake, while McGarry Township contains the Kerr Addison Mine and the community of Virginiatown. The past-producing Upper Canada mine is the site of Queenston's field exploration office. It is located in the Township of Gauthier (now with municipal status) - municipal offices within the village of Dobie. Queenston also owns a staffhouse in Virginiatown, some 15 km east of the exploration office.

The project consists of 878 patented, leased and unpatented mining claims in the Larder Lake Mining Division, totalling roughly 13,700 hectares (ha). The holdings are primarily in Teck, Lebel, Gauthier and McVittie townships, and, are subdivided into 17 individual properties (Fig. 1). Aside from the five-claim, Sylvanite group and 133 claims forming the Upper Beaver and Lac McVittie properties, the remaining 740 claims are contiguous over 30 km in the Kirkland Lake camp. Queenston has 100% interest in 14 of the properties, and, joint ventures on the other three – the Gracie West (50%), Kirkland Lake West (25%), and, Lac McVittie (41%). A variety of tenure, royalties and existing infrastructure is described under the individual property descriptions, with further details in Appendix A – Property and Claim List. Two primary royalties are noteworthy. Newmont Mining Corporation of Canada Ltd., a former joint venture partner, holds a sliding scale net smelter returns royalty (NSR) from 1 to 2% based on the price of gold, on 707 claims, hereafter referred to as the Newmont royalty. Inco Ltd., an earlier joint venture partner, holds a 1.3% NSR after 300,000 ounces (oz) of gold have been extracted from 107 claims comprising the Anoki-McBean and Munro properties. A complete list of the claims is included in Appendix A.

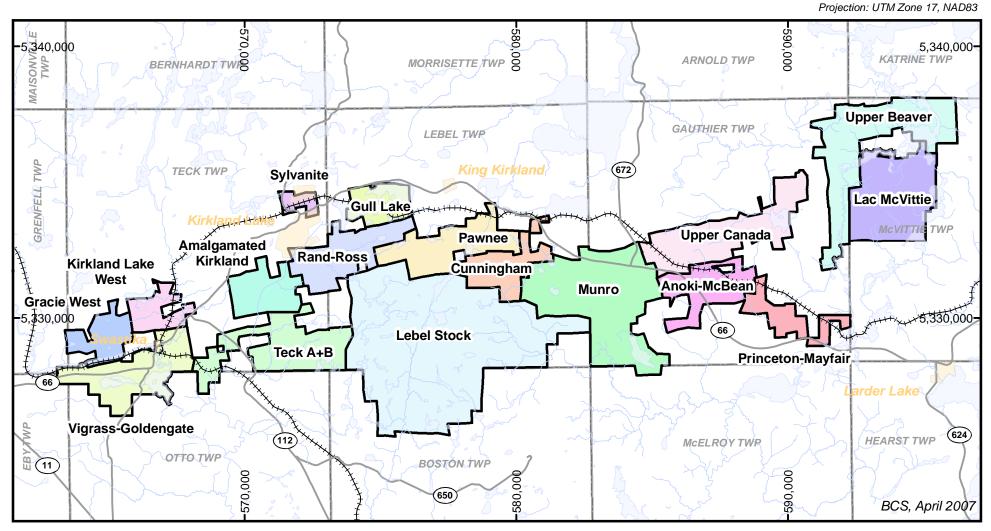




Figure 1

Queenston Mining Inc. Kirkland Lake Gold Camp Larder Lake Mining Division PROPERTY MAP

12

Kilometres

3.0 ACCESSIBILITY, PHYSIOGRAPHY AND CLIMATE:

The Kirkland Lake Gold Camp is within a typical boreal forest environment that has been subject to multiple fires and phases of logging. Topography for the most part is low relief with moderate to poor bedrock exposure in low-lying outcrops and isolated ridges, and, gently rolling sand plains related to past glacial activity. Elevations range from 290 to 410 meters (m) above mean sea level. The Munro esker complex in western Gauthier Township and eastern Lebel Township is the largest area without bedrock exposure on the Queenston lands. This glacial feature is in the order three to five kilometers wide, and, from a few meters to more than 100 m thick – sand and gravel pits are common.

Vegetation varies from clean stands of jack pine on the esker complex to mixed bush with spruce, fir, larch, jack pine, poplar, birch, ash and alders on the balance of the claims. Soil conditions and drainage tend to dictate the type of vegetation from open wet swamps to bare outcrop scarps. The climate is northern temperate with warm summers and cold winters. Temperatures vary from +30 degrees Celsius in the summer to -40 degrees Celsius in the winter. The ground is usually snow covered between mid November and mid April.

All of the Queenston lands are reasonably accessible via Highway 66, which cuts across the claim group in a number of areas. This main highway, combined with secondary roads, bush roads, trails and hydro lines, yields quick and easy access to most of the areas of interest. Topography and climate are such that the majority of the property is accessible on a year-round basis. Only a few areas are best explored under winter conditions.

As previously noted, part of the Queenston holdings are within the boundaries of the Town of Kirkland Lake – accessed via Highway 66 from Highway 11 to the Quebec border. Kirkland Lake is the main commercial center for the north part of the Timiskaming District and there is a capable workforce with experience in mining and mineral exploration.

4.0 HISTORY:

The beginning of exploration activity on the Queenston lands dates to the earliest days of the Kirkland Lake Gold Camp. While the amount of work undertaken in the past century is far too voluminous to summarize, highlights of some relevance include:

- **1906** first gold rush in northeastern Ontario into Kirkland Lake / Larder Lake most claims lapse but this period marks the beginning of the Kerr Addison story, and, the first gold production occurs in the Kirkland Lake Camp from Queenston's Vigrass-Golden Gate property (the Crescent Mine);
- 1911 discovery of gold by W.H. Wright becomes Wright Hargreaves Mine in Kirkland Lake;
- **1912** Tough Oakes (Toburn) and Lakeshore mines staked;
 - gold discovered at Argonaut Mine, now the Upper Beaver property;
 - shaft sunk by Victoria Creek Gold Mines Ltd. now Princeton property;
- **1913** shipment of high-grade ore from Tough-Oakes #2 Vein;
 - veins found on Burnside, Teck-Hughes and Sylvanite (a Queenston asset);
 Kirkland Lake Camp is underway;
- **1916** gold discovered at Anoki;
- **1927** shaft sunk on Pawnee property;
- **1928** Murphy Mines sink a shaft start of McBean development;
- **1929** shaft sunk on Ritchie property now the Princeton property;
- **1938** Upper Canada and Kerr Addison mines commence production;
- shaft sunk on Anoki;
- **1972** Upper Canada and Upper Beaver mines close most of management and mining team moves to Macassa Mine;
- 1976 Canico (Inco)-Queenston joint venture formed extensive ground and airborne geophysics, linecutting, mapping, overburden drilling and diamond drilling lead to discovery of 180 East, 240 East and 40 East zones with additional drilling on the Esker and Biroco prospects, and, advanced exploration on the McBean and Anoki projects;
- **1983** Canico commences production from the McBean open pit;
- **1987** underground exploration on the Anoki deposit via ramp by Canico, bulk sample taken;
- 1989 new gold discovery on Amalgamated Kirkland (AK) property by Battle Mountain;
- **1992** Cyprus Canada outlines a mineral resource on the AK property;
- 1993 Victoria Creek deposit discovered by Sudbury Contact Mines;
- 1996 Queenston purchases Canico interest, joint venture formed with Franco-Nevada extensive ground geophysics, mapping and diamond drilling lead to discovery of the Anoki Deep Zone, and, a new resource beneath the McBean Open Pit;
- **2002** Queenston purchases Franco-Nevada (then Newmont Mining Corp) interest, commences diamond drilling program on several properties, discovers Anoki South Zone.
- **2003** Kirkland Lake Gold Inc. purchases and consolidates five mines on the Kirkland Lake Main Break;
 - Kirkland Lake Gold discovers new, north-trending gold zones;
- **2004** Kirkland Lake Gold starts production at Macassa Mine.
- **2005** Queenston discovers deeper gold-copper zones below Upper Beaver mine.

More detailed summaries of previous work on the Queenston properties are addressed under the individual property descriptions.

5.0 PAST PRODUCTION AND MINERAL RESOURCES

Past production has been recorded on five Queenston properties: Upper Canada, Anoki-McBean, Sylvanite, Vigrass-Golden Gate and Upper Beaver. Production statistics are available from Roscoe-Postle Associates Inc. (RPA) report in 1996 for the Upper Canada and McBean deposits in Gauthier Township as: 1.52 million ounces (oz) gold from 4,294,873 tonnes (t) from the Upper Canada deposit mined between 1938 and 1972 (average grade 11.0 grams per tonne [g/t]), and, 48,513 oz gold from 505,866 t (average grade 3.0 g/t) from the McBean deposit, mined by open pit between 1983 and 1987. RPA (2004), also note that some 24,494 t of underground development material grading 3.98 g/t were extracted from the Anoki deposit in 1987-88. The Sylvanite deposit in Teck Township produced 1.68 million oz of gold from 4,580,786 t grading 11.4 g/t between 1927 and 1961 (RPA, 1996). More limited production of 31,089 oz gold from 94,011 t (average grade 10.29 g/t) occurred on the Vigrass-Golden Gate property from the Crescent deposit in Otto Township between 1910 and 1942, and, the Golden Gate mine in Teck Township between 1913 and 1947 (RPA, 1996). The Upper Beaver property was not part of the RPA 1996 report. Its past production data are available from "Gold Deposits of Ontario, part 2" (Lovell, H. L. et al. 1979). The Upper Beaver mine, in Gauthier Township, was a gold-copper deposit producing 140,709 oz of gold and 5423 t of copper from 526,678 t (average grade of 8.31 g/t gold, 1.03% copper) between 1913 and 1972.

Mineral resources on the Queenston properties represent a mix of historic resources that date prior to NI 43-101, and, current resources.

The historic resources are summarized as:

Deposit	Measured + Indicated	Inferred Resources
	Resources	
Upper Canada	1,899,973 t @ 6.87 g/t (1)	-
McBean	835,518 t @ 5.14 g/t (1)	723,934 t @ 4.57 g/t (1)
		1,111,303 @ 7.51 g/t (2)
Amalgamated Kirkland		2,639,338 t @ 4.46 g/t (2)
180 East	326,587 t @ 4.11 g/t (1)	
TOTAL	3,062,078 t @ 6.10 g/t	4,474,575 t @ 5.24 g/t

Table 1: Historic Mineral Resources

Historic calculations via RPA 1996 (1); Queenston Mining 1997 (2).

The historic mineral resources should not be relied upon as they are not compliant to NI 43-101 standards and have not been verified by a Qualified Person. Details on the parameters for the calculations are discussed under the individual property sections within the body of the report (as section 20.0 UPPER CANADA PROPERTY, 20.2 Mineral Resources).

During the course of the 2002-06 exploration program, the Anoki South Zone was discovered, and, a historic resource on the Anoki deposit was upgraded to NI 43-101 standards in tandem with the independent calculation on the Anoki South Zone by RPA in 2004.

Current Mineral Resources on the Anoki deposit after RPA (2004) include:

Deposit	Measured + Indicated	Inferred Resources
	Resources	
Anoki Main	522,300 t @ 5.70 g/t	35,800 t @ 5.69 g/t
Anoki South		106,000 t @ 6.48 g/t
TOTAL	522,300 t @ 5.70 g/t	141,800 t @ 6.28 g/t

Table 2: Current Mineral Resources

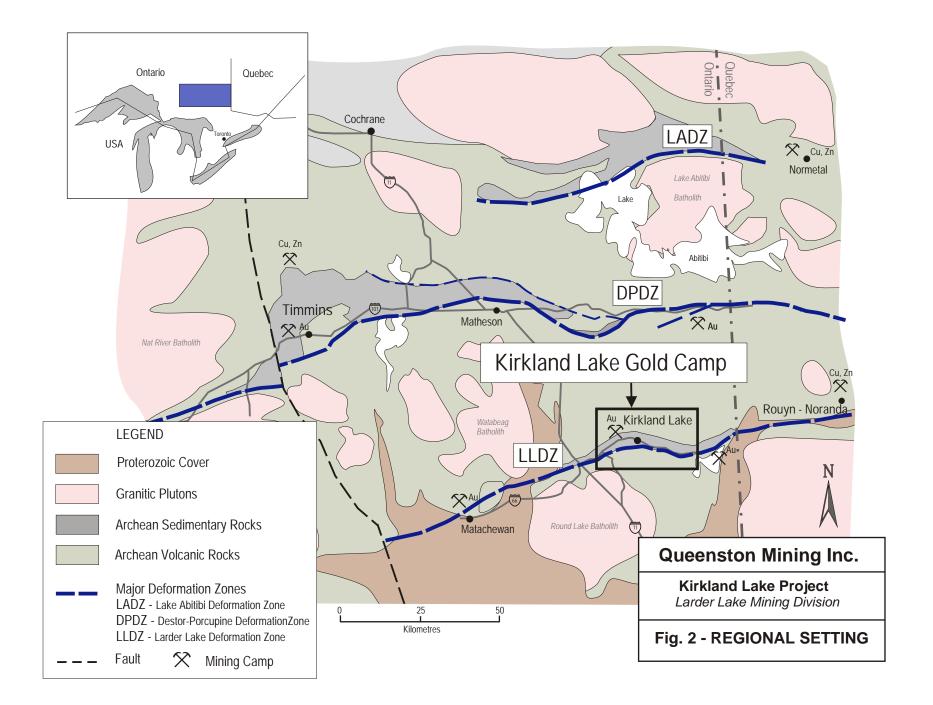
The parameters and assumptions for the current resources are detailed in section 21.0 ANOKI-MCBEAN PROPERTY under 21.2 Mineral Resources.

There is no current production on the Queenston lands.

6.0 GEOLOGICAL SETTING:

The Kirkland Lake Gold Camp is located in the south central portion of the Abitibi Greenstone Belt within the Archean Superior Province of the Canadian Shield. It is situated on the south limb of the regional Blake River synclinorium. The northern and southern limbs of the synclinorium are truncated respectively by the east-trending, Destor-Porcupine and the Cadillac-Larder Lake breaks. The majority of the historical gold production in the Abitibi Greenstone Belt is spatially associated with these two regional structures (Fig. 2).

The geological understanding of the Abitibi Greenstone Belt has been an evolving process. Up until the 1980's standard stratigraphic modeling was primarily based on stratigraphic superposition through field relationships and rock chemistry. That effort was replaced by a



lithotectonic approach in the mid 1980's. Currently, the earlier stratigraphic models are being revisited with a much stronger emphasis on geochronology.

Most recent data (Ayer et al, 2005) subdivide the Timmins – Kirkland Lake segment of the Abitibi Greenstone Belt into 11 supracrustal assemblages as:

Timiskaming (youngest) – sediments and alkalic volcanics + iron formation Porcupine – sediments and calc-alkalic volcanics + iron formation Upper Blake River – calc-alkalic and tholeiitic volcanics Lower Blake River – tholeiitic volcanics Upper Tisdale – calc-alkalic volcanics Lower Tisdale – komatiitic, tholeiitic and calc-alkalic volcanics + iron formation Upper Kidd-Munro – komatiitic, tholeiitic volcanics + iron formation Lower Kidd-Munro – calc-alkalic volcanics Stoughton-Roquemaure – komatiitic, tholeiitic and calc-alkalic volcanics Deloro – tholeiitic and calc-alkalic volcanics + iron formation Pacaud (oldest) – komatiitic, tholeiitic and calc-alkalic volcanics

Historical references to the Larder Lake Group, Gauthier Group and Kinojevis Group are presently incorporated into the above subdivision as the Lower Tisdale, Upper Tisdale and Lower Blake River assemblages respectively.

Intrusive rocks are subdivided into three broad categories: synvolcanic, syntectonic and posttectonic intrusions (Ayer et al., 2005). Synvolcanic intrusives are tied, via geochronology, to the 11 supracrustal assemblages noted above. They are not well represented in the Kirkland Lake area – the felsic to intermediate Round Lake batholith to the southwest, being the best example (Fig. 2). Synvolcanic mafic to ultramafic intrusions and posttectonic intrusions are similarly not well represented in the Kirkland Lake area.

More important in the project area, are the syntectonic intrusives, particularly the late syntectonic members. Ayer (2005) indicates that the late syntectonic intrusives are "broadly coeval with the Timiskaming assemblage", relatively small, and, occur in close proximity to the regional structures. Larger intrusions of this type include the Otto Stock, Lebel Stock and Murdoch Creek Stock. They tend to be alkalic, ranging from syenite to mafic syenite in composition. The syenite stocks often have contaminated margins and variably altered to metamorphosed contact aureoles.

The Kirkland Lake Gold Camp is essentially defined by a 5 km corridor around the Cadillac-Larder Lake Break. This major, east-trending, south-dipping, regional structure has juxtaposed Tisdale assemblage mafic to ultramafic rocks against much younger alkalic rocks and sediments of the Timiskaming assemblage. Thus the Blake River and Porcupine assemblages are absent in the immediate area of the break.

As previously mentioned, the majority of the historical gold production in the Abitibi Greenstone Belt is spatially associated with two major regional structures – the Destor-Porcupine and the Cadillac-Larder Lake breaks. Subsidiary and splay structures to the regional breaks are similarly significant. In Kirkland Lake proper (Teck Township), seven mines on the Kirkland Lake Main Break have produced in excess of 24 million oz of gold, while on the Upper Canada Break, the Upper Canada Mine (Gauthier Township) has recorded production of some 1.5 million oz – all of these mines are in Timiskaming assemblage rocks. On the other hand, the Kerr Addison Mine (McGarry Township) which occurs along the Cadillac-Larder Lake Break has produced more than 10 million oz of gold from Tisdale assemblage rocks.

Gold mineralization along the Cadillac-Larder Lake Break including the Kerr Addison, McBean and Anoki deposits is interpreted to be related to a series of hydrothermal events associated with three phases of deformation along the break (Ayer et al., 2005). Queenston's McBean and Anoki deposits appear to have formed early in the deformation history with remobilization likely during later deformation events. The nearby Upper Canada deposit "occurs in a high-strain, ductile deformation zone" (the Upper Canada Break), that probably represents a splay of the Cadillac-Larder Lake Break (Ayer et al., 2005). The polymetallic nature to some of the veins at the Upper Canada mine, however, is similar to the mineralization along the Kirkland Lake Main Break which is interpreted to be late in the deformation history of the Kirkland Lake camp. Deformation corridors related to the breaks can have a sphere of influence in excess of 1 km in thickness. Felsic intrusives are common within the deformation corridors and are often mineralized. While there is an intimate association with mineralization, most of the felsic intrusives are suggested to be syntectonic, providing an additional source of hydrothermal fluids during the deformation events.

The publication "Overview of Results from the Greenstone Architecture Project: Discover Abitibi Initiative" (Ayer et al., 2005) more technically addresses mineralization and deposit types in the Kirkland Lake area. Specific references to Gauthier Township (includes some Queenston properties) and Teck Township (deposits along the Kirkland Lake Main Break) include:

"Mineralization of the Upper Canada Mine (Gauthier Township) is confined to a ductile Upper Canada deformation zone. In the L zone, the most productive mineralized zone of the mine, gold

occurs in thin (2-5 mm) S2-parallel [i.e. foliation], quartz-carbonate bands or veinlets in quartzsericite-carbonate-pyrite pervasively altered and foliated Timiskaming assemblage tuff. Strong bulk carbonatization is characteristic of the mineralized zone. As evident from relationships of alteration assemblages and deformational fabrics, hydrothermal activity spanned through three deformation stages (D2 to D4). Gold mineralization was emplaced relatively early, during D2, and was overprinted by subsequent deformation. The D4 overprint is particularly notable: the mineralized zone as a whole and individual gold-bearing quartz-carbonate bands and veinlets are folded into Z-asymmetric folds with locally developed axial planar S4."

"Gold occurrences at the Anoki and McBean properties are localized within, or in immediate proximity to, the first-order LLCDZ [sic Cadillac-Larder Lake deformation zone]. Mineralized zones are not exposed at surface and were observed in drill core. Mineralization occurs as 1) sulphidized Fe-tholeiite flows (Anoki Main zone); 2) quartz stockworks in carbonate- and carbonate-fuchsite-altered ultramafic rocks ("green carbonate" McBean and Anoki Deep zones); 3) sulphidation and quartz veining with visible gold in Timiskaming clastic rocks, spatially associated with feldspar-phyric dykes (40 East zone); and 4) quartz veining with native gold and sulphides in cherty to graphitic exhalite horizons in basalts (Anoki South). Mineralization is typically accompanied by strong host-rock carbonatization. Relationships between carbonatefuchsite alteration assemblage and deformational fabrics present in drill core from the footwall of the McBean zone are compatible with broad syn-D2 timing of alteration."

"Mineralized zones of the McBean and Anoki properties constitute part of a regional-scale hydrothermal system that corresponds to an approximately 20 km long segment of the Larder Lake-Cadillac deformation zone from the Kerr Addison – Chesterville gold deposit (McGarry Township) in the east to the Anoki area (Gauthier Township) in the west. Other gold deposits of this group include Cheminis and Omega occurrences in McVittie Township. Sulphide-rich replacement ores in mafic (mostly tholeiitic) metavolcanic rocks ("flow ore") account for most production and resources, native gold-bearing quartz stockworks in carbonate-fuchsite-alteredmeta-ultramafic rocks ("green carbonate ore") rank second."

"Mineralization of Kirkland Lake camp (i.e., Toburn, Sylvanite, Wright-Hargreaves, Lake Shore, Teck-Hughes, Kirkland Lake Gold and Macassa mines) consists of gold and telluride-bearing quartz veins associated with [the] brittle to brittle-ductile Kirkland Lake fault (Main Break) and the '04 Break, as well as with immediate splays of these two faults. Presence of open-space-filling textures in veins, and the association of veins with brittle faults suggest relatively shallow crustal levels of mineralization. Relationships of gold-bearing veins, intra-mineral alkalic dikes and deformational fabrics, as well as presence of S4-parallel syn-mineralization styolites and cataclastic breccias in gold-bearing quartz veins suggest that mineralization could have formed early in the D4 event synchronous with south-over-north reverse-dextral to reverse movement along the Main Break."

Queenston's large land package is assembled along the Cadillac-Larder Lake Break across three townships as the primary target area. The claims are underlain by both Timiskaming and Tisdale assemblage rocks and related intrusives with a number of gold occurrences including the past-producing Upper Canada, McBean, Sylvanite, Crescent and Golden Gate mines. The Upper Canada and Sylvanite deposits occur within the Timiskaming assemblage, while the McBean open pit, Crescent and Golden Gate deposits are in Tisdale assemblage rocks. The past-producing Upper Beaver deposit is disconnected from the main group of claims and occurs within Upper Tisdale and Lower Blake River assemblage volcanics with associated sediments and felsic intrusives in northeastern Gauthier Township.

Mineral resources are found in both Tisdale (McBean, Anoki) and Timiskaming (Upper Canada, 180 East and AK) assemblage rocks. Most of the resources are historic – the Anoki Main and Anoki South deposits being the only current resources upgraded to NI 43-101 standards to date.

In 2001-2002, a compilation study reviewed past exploration results in light of the Operation Treasure Hunt airborne magnetic survey flown under the aegis of the Ontario Government in 2000. The study included relogging of historic drill core, and, linked linear break structures identified on enhanced, total field and vertical gradient magnetic maps with known deposits and recent exploration results. The compilation led to a new structural interpretation of the Kirkland Lake Camp, identifying six main structures / breaks that contain or localize the gold mineralization. From north to south, these structures are defined as the Kirkland Lake Main Break, 103 Break, Upper Canada Break, North Break, Cadillac-Larder Lake Break, and the South Break (Fig. 3). While the relative timing of these structures is unclear, collectively, they are related to 99% of the gold production in the Kirkland Lake area and are used as a model to guide exploration. The individual break structures are shown on the geological plans that accompany the individual property descriptions.

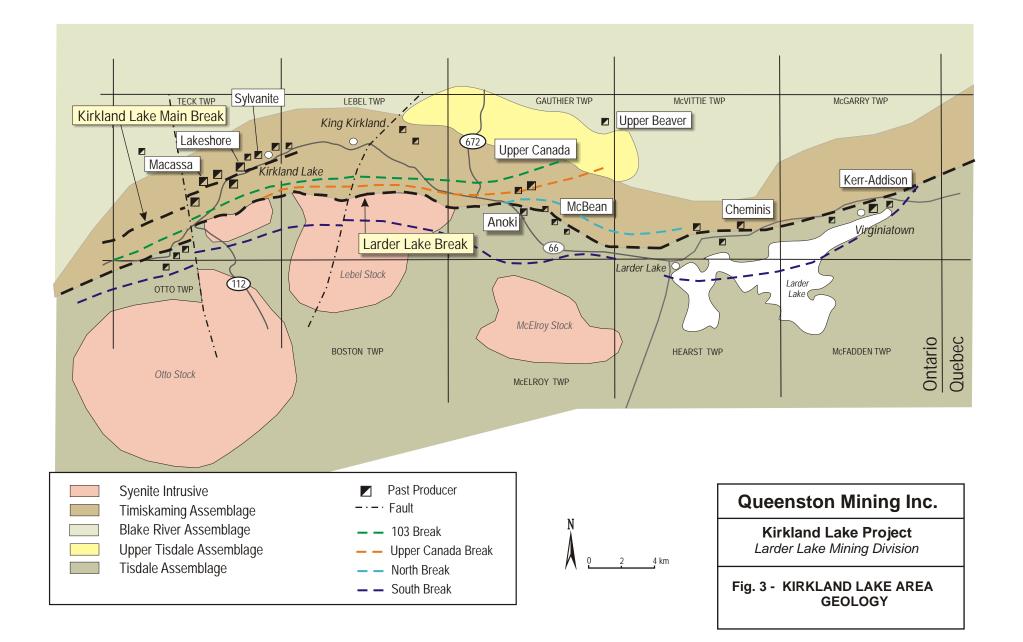
A new geological development in the camp, is the presence of gold-bearing cross structures, near perpendicular to the east-trending regional breaks (Kirkland Lake Gold, 2007). First discovered in 2003, the precise relationships between these features and the regional structures are not fully understood at this point in time.

7.0 KIRKLAND LAKE PROJECT – PROPERTY OVERVIEW

Queenston's Kirkland Lake Project is subdivided into 17 separate properties, descriptions of which follow on a property-by-property basis. The properties are addressed from west to east, beginning with the Vigrass-Golden Gate claims at the western extremity of the project area, and ending with the Lac McVittie property, four townships further east.

Fourteen of the properties form a contiguous block of 740 claim units assembled along the Cadillac-Larder Lake Break over some 30 km. The five-claim Sylvanite property and the 133-claim, contiguous Upper Beaver and Lac McVittie properties are separated from the main body of claims.

The property-by-property data treatment was chosen since the volume of data on the project area is large. During the period July 19, 2002 to December 31, 2006, (the time frame of this report), some 112,711 m of diamond drilling was completed in 191 holes. This includes 1,815 m drilled on



the Gracie West and Kirkland Lake West properties by joint venture partner Kirkland Lake Gold Inc. Adding the period 1996-2001, while Queenston was the operator for the Queenston – Franco-Nevada joint venture, total drilling amounts to 156,121 m in 265 holes. Linecutting during the period 1996-2006 totals 738 line km, on which a variety of geophysical surveys were completed.

Details on the claims for each of the properties are found in Appendix A (Property and Claim List). Claim location plans, geological plans and selected cross sections are located throughout the body of the report.

Overview (General Geology) plans and the Claim Configuration drawings are at a scale of 1:36,000. Geology & Drilling plan scales vary from 1:12,500 to 1:25,000 depending on the level of detail needed to depict the drillhole data. Bar scales accompany all of the geology plans. All of the drawings are numbered; locations are found in the Table of Contents under LIST OF FIGURES.

A simplified legend for the General Geology, and, the Geology & Drilling plans follows (Fig. 4). As a point of reference, Timiskaming assemblage rocks have a T as a suffix, while Tisdale assemblage units have an L as the suffix, versus K for Lower Blake River rocks, and, B for Blake River assemblage.

8.0 VIGRASS-GOLDEN GATE PROPERTY

8.1 Description, Location and History:

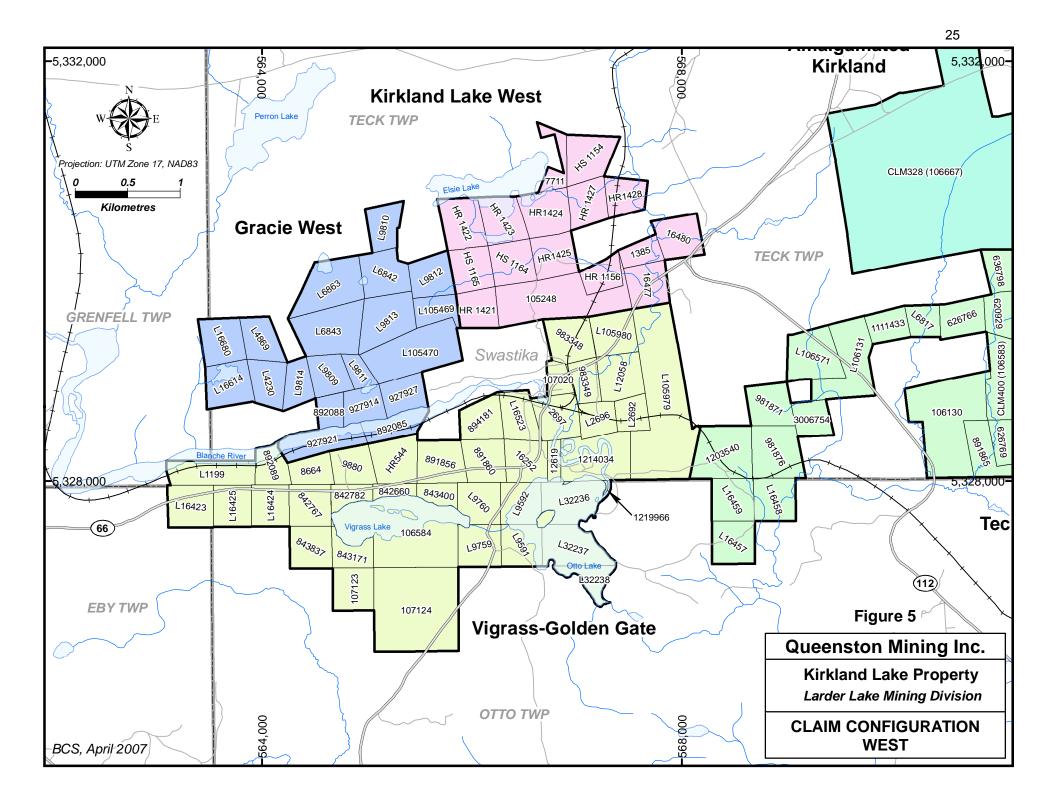
The Vigrass-Golden Gate property consists of 52 claims in southwestern Teck and northwestern Otto Township, plus roughly a claim length extending westward into Grenfell and Eby townships (Fig. 5). The claims are 100% owned by Queenston.

The property is essentially divisible into two claim groups as a reflection of its claim status and exploration history. The 26-claim, Golden Gate portion (east) was acquired from Golden Crescent Resources Corporation. Its boundary with the 26-claim, Vigrass portion (west) is defined by the western boundaries of claims L. 9759 and 9760, thence along the north boundary of L.9760 to the western boundaries of claims L.16252 and 16253 (Fig. 5). The Vigrass portion was acquired through seven separate option agreements. It contains a mix of patented, leased and unpatented claims with variable NSR, Net Profits Interests (NPIs) and advance royalties that are detailed in Appendix A. The Golden Gate portion similarly includes patented, leased and unpatented lands,

Figure 4

LEGEND for GEOLOGY and DRILLING FIGURES

<u>SURF</u>	ACE FEATURES	<u>LITHO</u>	LOGY
	Local Road	LATE ST	TAGE
	Highway		12 - Diabase
	Rail		11 - Huronian Sediments
53	Lake/River		10 - Deformation/Alteration Zone (carbonated trachyte)
~~~	Creek		9 - Deformation/Alteration Zone (carbonated komatiite)
GOLD	DEPOSITS	TIMISKA	AMING ASSEMBLAGE
•	Past Producer		8T - Alkalic Intrusive
	Advanced Prospect		6T - Conglomerate-Greywacke
_ 			5T - Greywacke-Conglomerate
×	Current Resource		4T - Alkalic Tuff
$\bigstar$	Historic Resource		3T - Alkalic Flow
+	Showing	BLAKE	RIVER ASSEMBLAGE
	Shaft/Adit		8B - Felsic Intrusive
RECE	NT DRILLING		7B - Mafic Intrusive
$\odot$	Collar		4B - Felsic-Intermediate Tuff
	Surface Trace		3B - Felsic-Intermediate Flow
FAULT	<u>'S</u>	LOWER	BLAKE RIVER ASSEMBLAGE
$\sim$	Cadillac-Larder Lake Break		8K - Felsic Intrusive
$\sim$	Main Break		7K - Mafic Intrusive
$\sim$	South Break		2K - Mafic Flow
$\sim$	Upper Canada Break	TISDAL	EASSEMBLAGE
$\sim$	Upper Canada Break (South Branch)		8L - Felsic Intrusive
$\sim$	North Break		7L - Mafic Intrusive
$\sim$	103 Break		IF - Iron Formation
17 N.	Minor Fault		6L - Conglomerate - Greywacke
			5L - Greywacke - Conglomerate
			4L - Felsic-Intermediate Tuff (Upper Tisdale Group)
			2L - Mafic Flow
			1L - Ultramafic Flow



but has only one underlying 2% NSR to Golden Crescent Resources in addition to the Newmont royalty.

The Vigrass portion is covered by north-trending grid lines spaced 100 m apart that were initially established in the late 1980's. On the Golden Gate portion, the last phase of exploration in the late 1980's utilized a northeast-trending baseline, with grid lines at 200 to 400-ft intervals. Both grid systems have deteriorated since the late 1980's, particularly on the Golden Gate lands. The baseline on the Vigrass portion, however, is still preserved and scattered grid line pickets are visible.

Two past-producing mines are found on the Golden Gate portion of the property. The Crescent mine contains a shaft to 676 ft (206 m) with seven levels developed at the 35, 100, 200, 300, 400, 525, and 650-ft intervals. Past work includes some 3400 m lateral development, 299 m in raises, and, an adit, some 400 m further south, with 195 m of development. The shaft is capped and the adit is backfilled. The Golden Gate mine has an inclined shaft at -65 degrees to 360 ft (110 m), and, a vertical shaft to 1000 ft (305 m) with eight levels developed on the 125, 225, 350, 475, 600, 725, 850 and 975-ft intervals. The specifics of the lateral development and raises is unclear. Both of the Golden Gate shafts are capped.

The property is located within and immediately east, south and southwest of the community of Swastika, some 7 km southwest of the Town of Kirkland Lake. Highway 66, which is the main transportation artery into Kirkland Lake, cuts across the north part of the property and runs close to the trace of the Cadillac-Larder Lake Break. Additional infrastructure includes the Ontario Northland Railway near the north boundary (Swastika is a train depot), a natural gas pipeline, and, a series of Hydro and telephone transmission lines. Otto Township Road 1, an all-weather gravel road, runs southwesterly from Highway 66. It follows along the west side of Otto Lake and provides easier access to the southern portions of the claim group. Aside from the shaft claim, surface rights are alienated on the Golden Gate portion.

Vigrass Lake occurs in the central part of the property. It drains easterly into Otto Lake, which defines the southeast boundary of the Golden Gate claims. The Blanche River system (north) and Amikougami Creek (east) also drain into Otto Lake. The waterways and associated swamps are surrounded by a series of outcrop ridges and knobs with a relief in the order of 60 m. Portions of the claim group have recently been logged, removing most of the marketable timber. In the areas unaffected by the logging operations, particularly north and west of Vigrass Lake, hummocky areas contain little soil cover over the bedrock and are vegetated with spruce, jack pine and poplar. Lower areas host black spruce, tamarack and alders.

As noted above, the varying ownerships of the two claim groups produced different exploration histories. The exploration history of the Vigrass portion is summarized as:

**1912** : Homestead Mining; 60 m adit on the Cadillac-Larder Lake Break.

**1929** : Matabanick Kirkland Gold Mines; 15 m shaft on claim 16425.

**1966**: Kerr Addison Mines; surface drillhole into massive sulphide showing on claim 9880.

1984 : Jomi Minerals; magnetic and VLF surveys, surface stripping, South Break area.

**1985** : Rio Algom Exploration; 162 m drillhole from island in Vigrass Lake.

**1986-88** : HSK Minerals; mapping, stripping, geophysical surveys (mag ,VLF, HLEM and IP), and 11drillholes (1223 m); Highway Zone discovered and South Break mineralization.

**1989-91** : Battle Mountain Canada; airborne magnetic and VLF survey, ground geophysical surveys (mag, HLEM), mapping, stripping, 4 drillholes (927 m).

**1994** : Queenston Mining; 3 drillholes (1841 m).

**1996-2001** : Queenston - Franco-Nevada joint venture, no new work undertaken.

**2002-03** : Queenston purchased the Franco-Nevada (then Newmont Mining Corp) interest; 2226.5 m drilled in 4 holes.

Neither the 60 m adit established by Homestead Mining in 1912, nor the two shafts shown on the 1945 compilation of Teck Township by J.E. Thomson have been located in recent surveys.

On the Golden Gate portion, the Crescent and Golden Gate mines developed separately until the

two properties merged under Golden Gate Mining in 1940. The history of the Crescent mine to

1940 includes:

1906 : gold discovered on north shore of Otto Lake by Swastika Mining.

**1911-13** : Swastika Mining Co. Ltd., shaft to 400 ft, 915 m underground development on 35, 100, 200, 300, and 400-ft levels; produced 520 oz gold from 1987 t grading 8.13 g/t (data are incomplete).

**1936-39** : Crescent Kirkland Gold Mines, dewater workings, 461 m lateral development, 569 m underground drilling, 1398 m surface drilling, 610 m surface trenching. **1940** : acquired by Golden Gate Mining.

The history of the Golden Gate portion is summarized as:

**1911-13** : Lucky Cross Mines, gold discovered north of railway; inclined shaft at -65 degrees to 200 ft, 244 m lateral development on 125-ft level, production (estimate) of 636 oz gold from 2268 t grading 8.7 g/t.

**1915-16**:Tretheway Silver-Cobalt Mining, dewatered, 60 m lateral development on 125-ft level. **1922-23**: Kirkland Gateway Gold Mines, shaft deepened to 360 ft with lateral development and diamond drilling on 125, 225 and 350-ft levels.

**1936-42**: Golden Gate Mining, dewatered, new shaft (#2) to 1000 ft, 5455 m underground development on 8 levels, 10,229 m underground drilling, 10 surface holes (341 m), 460 m trenching, 100 ton/day mill in 1938; acquired Crescent property in 1940 completing 303 m underground development on 200 and 300-ft levels; adit driven (to south) with 195 m of development, producing 476 oz (?) from 770 t grading 19.2 g/t.

**1943-44**: Golden Gate Mining, extensive work program on both mines with 118 underground drillholes (4342 m), 13 surface holes (849 m), 150 m trenching.

**1945**: Golden Gate Mining, 132 m underground development on 100, 300 and 400-ft levels of the Crescent mine, 5 surface drillholes (1463 m).

**1946-49**:Golden Gate Mining, Crescent shaft deepened to 676 ft, levels established at 525 and 650 ft, 1975 m lateral development, 164 underground drillholes (9710 m), some ore milled in 1947 – 5704 t at 6.51 g/t.

1950: Gateford Mines, 9 drillholes (1725 m) on Crescent and Golden Gate.

**1974**: Gateford Mines, geophysical surveys and surface drilling – 5 holes (374 m).

**1975**: Dickenson Mines, surface work and 3216 m drilled in 26 surface holes - assays suspect.

**1978-79**: Queenston Gold Mines option, mapping, geophysics, 3 surface drillholes into Blanche River / 103 Fault Zone (643 m).

**1980-81**: Queenston Gold Mines option to Steep Rock Iron Mines; 12 surface drillholes (2825 m). **1988**: Golden Crescent Resources, geophysical surveys, 18 surface drillholes (6238 m) including 3 deep holes (734, 886 and 1516 m).

**1996-2001**: Queenston Mining acquires property, joint venture with Franco-Nevada; no exploration done on property.

2002-06: Queenston Mining, no new work undertaken

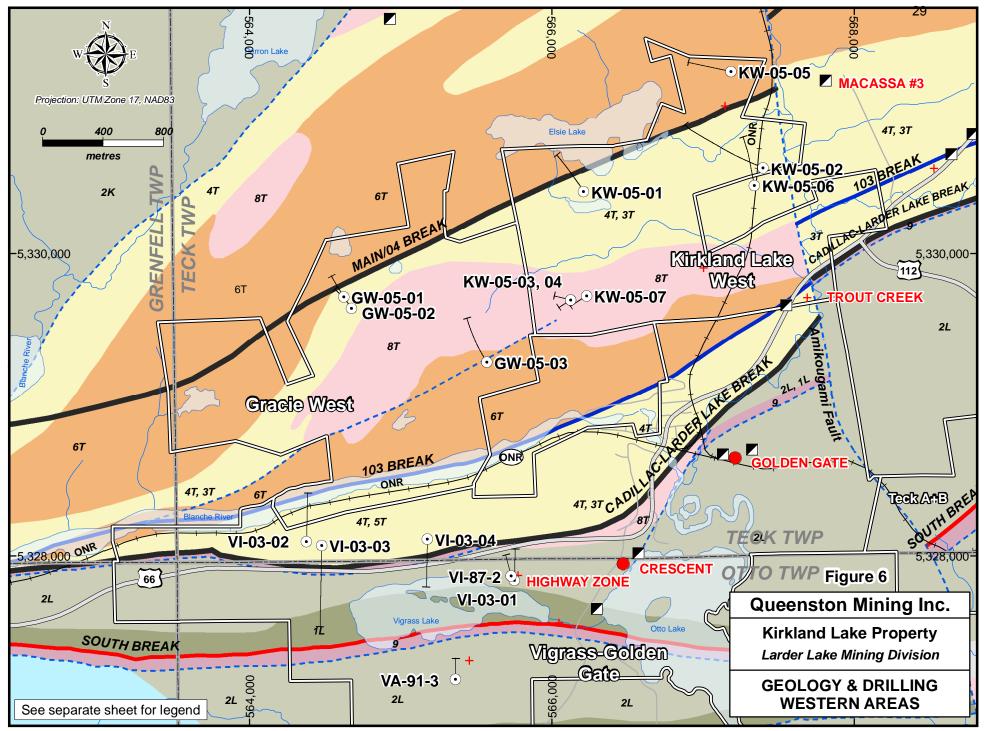
Past production is recorded for both the Crescent and Golden Gate mines totalling 94,011 t at a recovered grade of 10.29 g/t (RPA, 1996). The Golden Gate was the larger producer with 80,637 t averaging 10.63 g/t. The Crescent mined some 13,375 t averaging 7.2 g/t, including some 771 t grading 19.2 g/t from the adit zone.

No historic or current mineral resources exist on the property.

### 8.2 Property Geology and Mineralization:

The Vigrass-Golden Gate property hosts the regional Cadillac-Larder Lake Break, the trace of which is roughly along Highway 66 (Fig. 6). The break trends easterly through the Vigrass portion, thence more northeasterly across the Golden Gate lands. The break dips steeply south. It separates basalts and ultramafic komatiites of the Tisdale assemblage (south) from Timiskaming sedimentary and volcaniclastic rocks with local trachyte flows and tuffs northward. Deformation associated with the break is largely confined to Tisdale assemblage rocks in the hanging wall, represented by talc-chlorite schists and shears along with fuchsitic carbonate rocks and irregular syenite intrusives. The sphere of influence of the break is in the order of 200 to 400 m in this corridor. The Timiskaming assemblage is relatively 'fresh' near the Cadillac-Larder Lake Break on the Vigrass portion, but more highly deformed conglomerates are noted in the Golden Gate area.

Some 500 m south of the Cadillac-Larder Lake Break is a second, crudely subparallel, deformation corridor in Tisdale assemblage rocks identified as the South Break (formerly the Vigrass Lake fault zone). It is a complex zone of shearing and faulting accompanied by carbonate alteration and silicification. Hanging wall to the break, a 300 to 400 m basaltic sequence with sections of carbonaceous interflow material, is variably altered, silicified and pyritized. The



BCS, July 2007

eastward extension of the South Break tracks south of the Crescent Mine adit zone, and is characterized by a weak magnetic signature further east into Otto Lake.

A third feature, subparallel to the South Break structure, is 500 to 600 m further south. Minimal data are known about this minor fault, which is interpreted from the magnetics.

North of the Cadillac-Larder Lake Break, in the Timiskaming sequence, the 103 Break follows the Blanche River. It is also subparallel to the Cadillac-Larder Lake structure. The fault zone is not exposed on the Vigrass portion, but strong carbonate with or without hematite alteration, along with subsidiary and carbonatized shears are found in outcrop approaching the system. In the northern part of the Golden Gate portion, the 103 Break is characterized by strong shearing and carbonate alteration within deformed felsic intrusives.

The South Break is notably offset by a series of north-northwesterly trending cross faults in the Vigrass Lake area. Both left and right-handed senses of movement are indicated. These cross faults are less obvious in the Cadillac-Larder Lake Break and 103 Break structures with the exception of the major Amikougami cross fault at a similar orientation, that has a prominent, left-handed, lateral displacement of some 120 m, and, a vertical displacement of a similar magnitude – west side up (Carmichael, 2006). The surface trace of the Amikougami fault is essentially along the east boundary of the Golden Gate claims.

The Cadillac-Larder Lake Break and South Break structures have received the most attention in past exploration. The Highway Zone (Vigrass portion), some 200 m in the hanging wall (south) of the Cadillac-Larder Lake Break, was prospected by two old shafts (Thomson, J.E. map 1945-1, Teck Township) for which there are no records. It was rediscovered through surface prospecting by HSK Minerals in 1986-87. Channel samples assayed up to 12.3 g/t gold over 1.5 m. Diamond drilling produced a best assay of 348 parts per billion (ppb) gold across 6 m in hole VI-87-2 (Fig. 6). The drill intersection occurred within a quartz vein zone, footwall to a bleached, altered unit with up to 5% disseminated pyrite.

Both the Crescent and Golden Gate mines occur roughly 350 m south of the Cadillac-Larder Lake Break in highly sheared Tisdale assemblage volcanics. At the Crescent mine, a broad alteration and deformation corridor in the order of 100 m contains numerous, irregular felsic to intermediate intrusives cutting schistose and carbonated ultramafic rocks. Alteration, silicification, brecciation and veining are common within the system and tend to prefer the felsic intrusive hosts. A number of faulted and gouged zones at the Crescent mine hampered development. The Golden Gate mine occurs in a similar physical position as the Crescent. Faulting is not as severe at the Golden Gate but the 'A' fault cuts off the deposit and a series of flat faults did hamper development. The 'A' fault is subparallel to the Cadillac-Larder Lake Break. It strikes east-northeasterly and dips at 45 degrees south, cutting off the similar striking veins that dip northerly into the fault (RPA, 1996).

On both properties, mine development focused on banded to fractured and brecciated quartz veins from 1.5 to 2.75 m thick, with varying amounts of pyrite, galena, molybdenite and native gold along distinct, dark coloured fractures. The majority of underground development was on east-northeasterly trending veins but the initial discovery on the Crescent deposit was on a north-trending vein with visible gold. Veins are highly disrupted by faulting.

Like the Highway Zone, the South Break occurs on surface where broad zones of anomalous gold are associated with altered, carbonated, silicified and brecciated basalts containing up to 5% disseminated pyrite. Grab samples assay up to 5.19 g/t gold. Battle Mountain drillhole VA-91-03 (Fig.6) encountered four anomalous zones from 7.1 to 14 m thick in the South Break area, represented by 0.16 g/t over 7.1 m, including 1.30 g/t over 0.90 m, and; 0.36 g/t over 14 m. This broad zone tracks easterly past the Crescent mine adit and thence into Otto Lake. The Crescent adit appears to sit footwall (north) of the South Break. Unfortunately, there is essentially no geological information on the adit zone other than the mention of flat veins in the literature.

### 8.3 Exploration, Drilling and Recommendations:

Diamond drilling commenced on the Vigrass portion of the Vigrass-Golden Gate property on January 27, 2003. Heath and Sherwood (1986) Inc. of Kirkland Lake was the drill contractor. The drilling was completed in two phases - two holes were drilled between January 27 and February 22, followed by a later program of two drillholes between November 4 and December 11, 2003. Some 2,226.5 m were drilled in the four holes. All of the core was NQ size.

Drillholes were laid out via grid coordinates in the field supplemented by GPS. In most instances, collar locations were chained from the existing 100+00N Base Line due to the deterioration of the line pickets.

The objectives of the first drilling phase were to section the stratigraphy below the Highway zone mineralization northward through the Cadillac-Larder Lake Break (hole VI-03-01), and, to test the structure (103 Break) associated with the Blanche River (hole VI-03-02). Other than the Highway Zone mineralization, only minimal work had been previously undertaken on these targets (Fig. 6).

Hole VI-03-01 intersected the basaltic unit that is host to the Highway Zone from 49.5 to 99.1 m and continued northward through the Cadillac-Larder Lake Break. The Highway Zone was represented by widely scattered, irregular quartz veinlets, each enveloped in an ankeritic alteration halo and weakly mineralized with disseminated pyrite. Gold values were low as: 0.23 g/t over 1.5 m; 0.31 g/t over 2.53 m, and, 0.34 g/t over 3.51 m.

Lower in hole VI-03-01, from 259.0 to 284.9 (21 m true width), a steeply south-dipping, pyritic, silicified zone was intersected that appeared similar to flow type mineralization characteristic of the Kerr Addison deposit situated on the same structure 40 km east. The host was a mix of well silicified, carbonated and albitized mafic volcanic, ultramafic and felsic rocks. Gold values, however, were only weakly anomalous up to 0.11 g/t over 1.4 m. This attractive zone occurred in the hanging wall of the Cadillac-Larder Lake Break and was the primary focus in the second phase of drilling.

Drillhole VI-03-02 sectioned the Timiskaming assemblage some 1.4 kms west and 300 m north of hole VI-03-01 - the target being the 103 Break. Two strong faults were intersected: an upper, unnamed fault from 36.7 to 50.9 m, consisting of intense sericitic fracturing, crushing and shearing that grades into cataclastic structures, and, a lower mylonitic fault with gouge (the 103 Break), from 395.1 to 398.5 m which is preceded by several strong splays. The first break did not exhibit any significant assay values. The 103 Break and its upper branches, however, were weakly anomalous throughout, assaying up to 1.6 g/t over 1.8 m in an upper splay, and, 0.2 g/t over 8.9 m in the core of the structure.

Drillhole VI-03-02 transgresses onto the current Gracie West property – the claims formed part of the Vigrass-Golden Gate property when the hole was drilled in 2003.

In the second drilling phase, holes VI-03-03 and VI-03-04 were designed to test, along strike, the attractive target intersected hanging wall to the Cadillac-Larder Lake Break, in hole VI-03-01. Lack of access precluded drilling northerly, such that both of these holes were drilled from north to south. Two narrow pyritic zones were encountered hanging wall to the Cadillac-Larder Lake Break in hole VI-03-03 which returned low values. Hole VI-03-04, failed to intersect any significant feature similar to the pyritic silicified zone in hole VI-03-01.

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	Zone
	(m)		(m)	(m)	(m)	Width	(g/t)	Comments
VI-03-01	9790N/11070E	-68	94.5	98.1	3.5	2.7	0.3	Highway Zone
	including		94.5	95.4	0.9	0.7	0.9	
			259.0	284.9	25.9	21.0	NSV	Pyritic silicified zone
VI-03-02	10076N/9700E	-50	301.7	303.5	1.8	1.3	1.6	Quartz vein / splay
			391.7	400.6	8.9	6.3	0.2	103 Break
VI-03-03	10049N/9800E	-55	541.9	544.4	2.5	2.2	NSV	Pyritic vein zone
			606.7	608.9	2.2	2.0	NSV	Pyritic calcified zone
VI-03-04	10075N/10500E	-57					NSV	No mineralization

**Table 3: Vigrass Drilling Results** 

NSV = no significant values

The Vigrass drill program highlighted two strong structures of geological interest that have received minimal attention in the past. In fact, no other drilling is recorded on the 103 Break structure in this area. Two or three drillholes are recommended to aid in evaluating the structure. Further drilling is also recommended on the Cadillac-Larder Lake Break, east of the Highway Zone mineralization where there is a higher proportion of felsic intrusives in the system.

On the Golden Gate portion of the claims, the Crescent and Golden Gate mines are candidates for the 3D computer modelling program, given the variations in vein orientations, and, the number of structures and cross structures within the system. The 3D modelling would aid in providing an overview of the deposits and could potentially generate targets for future exploration.

### 9.0 GRACIE WEST PROPERTY

### 9.1 Description, Location and History:

The Gracie West property consists of 21 claims in southwestern Teck Township (Fig. 5). Thirteen of the claims are patented for mining rights and surface rights with two leases covering three claim units, and, five unpatented claims. The patented claims are registered to Kirkland Lake Gold Inc. The unpatented claims and leases are owned by Queenston with underlying 10% NPI royalties, and, the Newmont royalty. Tenure data are detailed in Appendix A.

The property is a 50:50 joint venture with Kirkland Lake Gold dated to November, 2004. On the thirteen patented claims, Queenston converted a 20% NPI to a 50% participating interest with Kirkland Lake Gold, and, contributed an additional, contiguous, eight claim units to create the combined property. These eight contiguous claims formed part of Queenston's historic Vigrass property. Kirkland Lake Gold is the operator of the joint venture, and, incurred the first \$100,000 in exploration expenditures (completed in 2005). Further expenditures will subsequently be shared on an equal basis.

The Gracie West property is covered by north-northwesterly trending grid lines (azimuth 330 degrees), spaced 200 ft apart, plus four cross lines / tie lines at 400-ft intervals established around the base line (i.e. azimuth of 60 degrees). The cross lines, in conjunction with the base line, are designed to help define cross structures in the geophysical surveys.

The property is contiguous with the Kirkland Lake West property to the east, and, the Vigrass portion of the Vigrass-Golden Gate property to the south. Access is poor, via a bulldozer road and a series of bush trails that eventually connect eastward with a poorly maintained track / skidoo trail extending north from the community of Swastika.

The Blanche River, some 120 m wide in this area, cuts the two southernmost claims in the property. One line of the Ontario Northland Railway is on the south side of the river, just north of the south boundary. The topography is characterized by low lying swamps / marshes, prominent east to northeast-trending outcrop ridges and sections of hummocky terrain. There is some 50% bedrock exposure on the claims and a few steep cliffs in the north part of the property. Relief is in the order of 60 m. Vegetation is mixed spruce, fir, poplar, birch and jack pine, with alders, cat tails and marsh grasses in the wetlands.

Given that the original thirteen claims of the Gracie West property are patented, the exploration history of the work done in the area is abbreviated as:

**1920-37**: Murphy property; small claim groups (13 claims) patented in the 1920's; some surface work (no records available).

1937: M. J. O'Brien Ltd. option claims; 12 drillholes (1390 m) testing Main Break.

**1989-91**: Battle Mountain Canada; airborne mag and VLF surveys; ground magnetics, mapping on the 8 former Vigrass claims.

1997: Kinross Gold Corp; 1 drillhole (452 m).

**2004-05**: Kirkland Lake Gold / Queenston joint venture; geological mapping, geophysical surveys (mag and IP), 3 drillholes (893 m).

No historic or current mineral resources are developed on the property.

### 9.2 Property Geology and Mineralization :

The Gracie West property is underlain by Timiskaming assemblage sedimentary and tuffaceous units striking generally subparallel to the base line at 60 degrees (Fig. 6). The sequence dips 50 to 70 degrees south and faces south (Vincent, 2006). The package is also cut by a substantial (450 to 550 m), stock of mafic syenite in the central part of the property that is crudely subparallel to the regional, east-northeast-trending deformation. Other intrusive rocks include late biotitic lamprophyres, Matachewan diabase dykes, and, syntectonic syenite porphyries.

Structurally, the property covers two of the main deformation features in the Kirkland Lake camp – the Kirkland Lake Main Break in the north part of the property, and, the 103 Break near the southern limits of the claim group. Both features strike east-northeasterly and dip steeply south. A third, unnamed fault occurs near the south contact of the mafic syenite stock, some 400 m north of the 103 Break (Fig. 6).

The relationship between the Kirkland Lake Main Break and a nearby break (the 04) on the Macassa property (Kirkland Lake Gold) is unclear, such that the break is identified as the Main / 04 Break on the accompanying plans. A more detailed description of the relationship between the two structures is included under the KIRKLAND LAKE WEST PROPERTY section 10.0.

Gold deposits in the Kirkland Lake camp generally occur along high strain zones. On the Gracie West property, there are a series of high strain zones associated with the regional breaks. They are variably carbonated, silicified, veined and mineralized but assays to date are weak.

### 9.3 Exploration, Drilling and Recommendations:

Exploration on the Gracie West property commenced in late 2004 with a linecutting program contracted to Robert Craig from Rouyn, Quebec. Basic exploration followed with a magnetic survey (58.3 km), Induced Polarization survey (10 lines / 7.6 km), geological mapping and prospecting, and, diamond drilling (3 holes / 893 m) during 2005.

The magnetic survey was contracted to Exsics Exploration Ltd of Timmins, Ontario. The total field survey utilized a Scintrex Envi Mag system. It highlights the mafic syenite stock and the more highly magnetic tuffaceous members of the stratigraphy in contrast to the weakly to nonmagnetic Timiskaming sediments. More subtle, are magnetically depleted zones at various orientations

related to deformation, where magnetite is commonly replaced by combinations of hematite, chlorite, ankerite and pyrite.

The Induced Polarization survey was conducted by Belanger Geophysics of Val D'or, Quebec. It was a frequency domain survey using a dipole-dipole array with an 'a' spacing of 100 feet, n= 1-6. Pseudosections included plots for resistivity, phase and metal factor. The resistivity plots can be correlated with contrasting rock types and contacts but no significant metal factor anomalies are indicated.

The geological survey was conducted by P. Vincent, P. Geol, M.Sc., with assistance by T. O'Connor. Both were employed by Kirkland Lake Gold. The survey established the stratigraphic and structural framework in today's context. Within the survey, Vincent (2006) indicated:

'The highest gold value found (1320 ppb; GW-032A) is related to a strong anastomosed shear zone, bearing 240 degrees, in a clast-supported conglomerate of the Upper Chaput-Hughes Formation [i.e. Timiskaming], located 100 meters north of the inferred Main Break. It is a non-penetrative planar structure defined by flattened and ruptured clasts in a sulphide enriched greywacke matrix (10-15% disseminated pyrite).'

This area became a target for the diamond drilling campaign that followed.

In December 2005, 2,927.6 ft (892.6 m) were drilled in three holes on the Gracie West property. Heath and Sherwood (1986) Inc. from Kirkland Lake, Ontario was the drill contractor. Core size was BQ. The drillholes were logged in Imperial measure on Prolog software to be exported into Datamine and Promine – the programs utilized by Kirkland Lake Gold. All three holes were spotted via grid coordinates (Fig. 6).

Hole GW0501 was designed to test the shear zone with anomalous gold (1320 ppb) on line 156 West, and, the stratigraphy northward beyond the outcrop exposures. Hole GW0502 was drilled 300 ft (91 m) further south on line 156 West to test the Main / 04 Break near the collar of the hole and continue northward for a deeper intersection of the target in hole GW0501. Hole GW0503 was planned to test the unnamed break south of the mafic syenite on line 138 West and potential structures within the mafic syenite.

Drillhole GW0502 (the southernmost hole on 156W), collared in variably magnetic tuffaceous rocks, encountering a conglomerate package from 150-515 ft, and, a greywacke sequence to the end of the hole at 750 ft (including an internal, altered, bleached tuffaceous section from 560.0-585.2 ft). Drillhole GW0501 (91 m north) collared in the conglomerate member intersected in hole GW0502. The conglomerate extended to 260 ft, followed by a wacke sequence to the end of the

hole at 741.6 ft. A bleached, altered, tuffaceous section comparable to the unit in hole GW0502 (560.0-585.2 ft), is not encountered in hole GW0501. In both holes, the conglomerate member is intruded by much later, north-trending, dyke/dykes of Matachewan diabase.

Several narrow chloritic slips to breaks and gouges are recorded in the logs. The Kirkland Lake Main / 04 Break is tentatively correlated with variable shearing and deformation around the tuff / conglomerate contact in hole GW0502 from 125-160 ft. A broader zone with deformation and erratic gouge from 390-495 ft in hole GW0502, appears to correlate with a similar corridor from 80.4-201.0 ft in hole GW0501. These two broader zones of deformation, when projected up dip (65-75 degrees south), enclose the target area with anomalous gold (1320 ppb) mapped on surface. Weakly anomalous gold values to 100 ppb with 5% disseminated pyrite over a foot erratically occur in the target area in hole GW0501, with similar erratic values to 171 ppb over 1.35 ft around the upper contact of the broader deformation zone in GW0502. The target area in GW0501 is interrupted by a dyke to series of dykes of diabase with local faulted contacts between 83.3 and 222.3 ft.

The Main / 04 Break deformation corridor in hole GW0502, hosted only erratic, weakly anomalous gold values.

Drillhole GW0503 collars into a conglomerate, wacke and tuff package with two thick units of mafic syenite from 176.3-380.0 and 427.7-1436.0 ft. The unnamed break near the collar of the drillhole on surface is represented by a strongly foliated to sheared zone from 70-100 ft. No anomalous gold accompanies the shearing. A second strong shear is noted from 400.0-403.2 ft in a tuff unit but it is similarly without anomalous gold values. No gold assays greater than 100 ppb are encountered in the hole.

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	Zone
	(feet)		(ft)	(ft)	(ft)	Width	(g/t)	Comments
GW0501	156W/16+00N	-45	80.4	201.0	120.6	104.0	NSV	Target shear
GW0502	156W/13+00N	-45	125.0	160.0	35.0	n/a	NSV	Main / 04 break
			390.0	495.0	105.0	98.0	NSV	Target shear
GW0503	138W/13+00S	-45	70.0	100.0	30.0	n/a	NSV	Unnamed break
			400.0	403.2	3.2	n/a	NSV	Strong shearing

 Table 4: Gracie West Drilling Results

n/a - indicates insufficient data to establish a true width.

NSV - no significant values

The 2005 exploration program on the Gracie West property upgraded the database into current geological thinking. The drilling component, however, was negative with only very weakly anomalous gold values. Further surface work could be undertaken on the claims but that effort is probably best delayed while exploration targets become better developed on the adjacent Kirkland Lake West property.

### **10.0 KIRKLAND LAKE WEST PROPERTY**

### **10.1 Description, Location and History:**

The Kirkland Lake West property consists of 18 claims in southwestern Teck Township (Fig. 5). Fifteen of the claims are patented for mining rights and surface rights with three claim units held under one lease (mining rights only). The property is owned by Newmont Mining Corporation of Canada Ltd and is under option to Queenston Mining Inc. Queenston is earning a 50% interest in the property by incurring \$2.5 million in exploration expenditures prior to June 30, 2008. On November 15, 2005, Queenston formed a joint venture with Kirkland Lake Gold Inc. to earn 50% of Queenston's interest. After Kirkland Lake Gold's earn-in period (now complete), Queenston and Kirkland Lake Gold will share expenditures equally. Upon maturity, in 2008, further expenditures will be divided on a pro rata basis as Queenston and Kirkland Lake Gold at 25% each, and, Newmont 50%. A 1% NSR royalty is attached to three patented claims: L.1385, 16477 and 16480. Claim specifics are detailed in Appendix A.

Except for five claims in the southeast corner of the property, the Kirkland Lake West lands are covered by north-northwesterly trending (azimuth 330 degrees) grid lines spaced 200 ft apart, and, cross gridded with lines at 400-ft intervals (azimuth 60 degrees), that are parallel to the 00 Base line. The base line is subparallel to the Kirkland Lake Main / 04 Break orientation. The cross gridding is designed to facilitate recognition of cross structures, only recently discovered (2003) as important mineralizing features on the Kirkland Lake Gold claims further east (Kirkland Lake Gold, 2007).

One shaft is located in the far southeastern corner of the property on claim 16477 (Fig. 5). The shaft was sunk by Trout Creek Gold Mining to a depth of 76 ft (23 m) with 61 m of lateral development on the 76-ft level between 1927 and 1931 (Fig. 6). The shaft is backfilled.

The claims are contiguous with the Gracie West property to the west, and, the Vigrass-Golden Gate property to the south. The lands to the north and east are owned by Kirkland Lake Gold – the Macassa mine property. Access to the Kirkland Lake West property is via a poorly maintained track / skidoo trail that extends north from the community of Swastika to Elsie Lake, with a segment leading further north to the east-trending Goldthorpe Road. A branch of the Ontario Northland Railway runs northerly from Swastika and cuts the eastern portion of the claim group, and, a natural gas pipeline cuts across the southeast part of the claims.

Elsie Lake is located in the northern part of the property. It drains eastward into Amikougami Creek which flows southerly along the far eastern part of the claim group. Most of the terrain on the property is hummocky in character with low-lying outcrop exposures, although there are substantial outcrop knobs to ridges in the northeast part of the claim group, producing an overall relief of some 60 m from waterbodies and marshy lands to outcrop ridges. Vegetation is mixed spruce, fir, poplar, birch and jack pine with alders, cat tails and marsh grasses in the wetlands.

The exploration history of the property is summarized as:

1927-31: Trout Creek Gold Mining; gold discovered on claim 16477 (southeast); shaft sunk with 200 ft (61 m) lateral work on the 76-ft level; one ton of 'ore' shipped yielding 77 ozs gold.
1937: Kirkland Gateway Mines; geological mapping, 1508 m drilled in 10 holes (DDH 1-10).
1938: Kirkland Gateway Mines; further mapping and drilling – 3150 m in 18 holes (DDH 11-27).
1945-46: Sahtram Gold Mines; 16 surface drillholes by Toburn Gold Mines Ltd. plus some underground drifting on the 76-ft level (southeast corner).

**1982**: Queenston Gold Mines; linecutting, magnetic survey, geological mapping.

**1983**: Queenston Gold Mines; further mapping, mechanical stripping and sampling in the northeast part of the property.

**1984**: Queenston Gold Mines; diamond drilling, 10 shallow holes on the structure identified during the 1983 stripping.

**1986**: Queenston Gold Mines; 2 further drillholes in the stripped area.

**1988-91**: Queenston Gold Mines; option to Lac Minerals, 1544 m of underground development and exploration on the 4750, 5875, 6450 and 7050-ft levels; minor production; 53 underground drillholes (6700 m).

**1994**: Queenston Mining Inc.; option to Cyprus Canada Inc; linecutting, magnetics and induced polarization surveys; 5 surface drillholes (2595 m).

**1995**: Queenston Mining Inc. sells property to Franco-Nevada Mining Corp.

2002: Franco-Nevada and Normandy Mining merge with Newmont Mining (new owners).

2004: Queenston Mining Inc options property from Newmont.

**2004-05**: Queenston Mining Inc; linecutting, mechanical stripping, geological mapping, Induced Polarization geophysics, 7 surface drillholes (3555 m).

2005: Queenston Mining Inc and Kirkland Lake Gold form a joint venture

**2006**: Kirkland Lake Gold (operator of joint venture); by-pass drift and underground rehabilitation on 4750-ft level; 9 underground drillholes – 3024 ft (922 m).

The Trout Creek and Sahtram entries in the history refer to work on four claims in the southeast corner of the property – development was separate from the main body of claims until amalgamation of both groups under Queenston Gold Mines in 1981-82.

Underground access was initially established by Lac Minerals on the Kirkland Lake West property between 1988 and 1991 with drifting on the 4750, 5875, 6450 and 7050-ft levels. Drifting was westward from the Macassa #3 shaft, some 400 m east of the property boundary. On the 4750 level, drifting was essentially along the Main / 04 Break and Lac Minerals reported limited production of 87.2 oz of gold from 153 t grading 17.5 g/t in 1991 (Page, 2006). The 4750 level is currently the only underground access available for exploration (Carmichael, 2006). It is also the the longest drift of the Lac program, extending some 2800 ft (854 m) west of the Macassa #3 shaft (about 450 m on the Kirkland Lake West property).

Limited production was also noted in the literature by Trout Creek Mines in 1931 (Lovell, 1979) of 77 oz of gold from one ton of 'ore'.

No historic or current mineral resources are presently developed on the property.

### **10.2 Property Geology and Mineralization:**

Like the Gracie West property, the Kirkland Lake West claims are underlain by Timiskaming assemblage sedimentary and tuffaceous units striking generally subparallel to the base line at 60 degrees and dipping at 60 to 75 degrees south (Fig. 6). A substantial mafic syenite stock also extends east-northeast from the Gracie West property. On Kirkland Lake West, the mafic syenite is along the southern limits of the grid system and is 300 to 425 m thick – the south contact being beyond the grid coordinates. Other intrusives include late dykes of biotitic lamprophyre and syntectonic syenite porphyries up to 60 m in thickness.

The Kirkland Lake Main / 04 Break and the 103 Break noted on the Gracie West property are similarly noted on the Kirkland Lake West lands, although the 103 Break just clips the southeast corner of the group and is not covered by the grid system (Trout Creek Mines area).

The major, north-northwest trending, steeply west dipping, Amikougami cross fault on the east part of the Vigrass-Golden Gate property, slices through the eastern boundary of the Kirkland Lake West group. Carmichael (2006) indicates a left-handed lateral displacement of 300 to 400 ft (90-120 m), and, a vertical displacement of 350 to 450 ft (105-140 m), west side up. The displacement is important, given that the first three properties described (Vigrass-Golden Gate, Gracie West and Kirkland Lake West) are all primarily west of the cross fault – i.e. west of the main mineralized corridor in the Kirkland Lake camp.

East of the Amikougami fault, Kirkland Lake Gold (2007) indicate that:

'The Kirkland Lake Main Break is interpreted to be a post-ore thrust or reverse fault with an average strike of 65 degrees, an 80-degree southerly dip, and, an estimated displacement of 450 m. At depth (below the 3475-foot level), the fault flattens, and, below 4125 feet, a branching fault system occurs. A subparallel break, called the '04', enters the fault system at an acute angle from the north, connecting to the north branch of the Kirkland Lake Main break down dip and along strike via the 'S' break below the 4125-foot level. The 04 break is the primary ore structure at the Macassa mine. It splits and recombines forming a 1000-foot lozenge, with ore on the north and south structures or the full width between. This lozenge extends from the bottom level at 7050 feet to the 3800 level, with recent exploration detecting both the north and south arms of the 04 break 600 feet up-plunge of the Macassa orebody. Current work on the 3400 level is designed to follow the 04 break closer to surface. The 04 break is also a thrust fault, striking 65 degrees, with a 72-degree south dip.'

On the Kirkland Lake West property, the 4750 level drift follows along a chloritic, mylonitic structure designated as the 04 Break. It has associated alteration, brecciation and silicification in the adjacent wallrocks. Lac Minerals underground drillhole 47-391 (+46 degrees, on section 60 West), in 1991, intersected a 22.1 ft (6.7 m) mineralized interval hanging wall to the 04 Break assaying 9.3 g/t from 202.4 to 224.5 ft. The true width estimate is 5.6 ft (1.7 m). The host rock was a highly altered, brecciated, silicified, carbonated and hematitic basic syenite containing disseminated pyrite. This intersection became a primary target area in the current underground exploration program. The interval includes a 2 ft (0.6 m) sample assaying 36.7 g/t.

On surface, prior stripping, trenching and diamond drilling exposed a break structure in the north part of the property. This feature, when extrapolated to the 4750 level, articulates an average dip of 68 degrees south – flatter than both points of departure for the Kirkland Lake Main Break and the 04 Break. Also, more than one break is encountered in the surface drilling such that the surface feature is probably best identified as the Main / 04 Break given the current working knowledge of the breaks and the large gaps in the database at depth for both the Kirkland Lake West and Macassa properties (Fig. 6).

Recently, north to north-northwest trending cross structures have become increasingly important exploration targets in the camp. Vincent (2006) notes:

"To date, nine mineralized structures, including at least five, north-south structures, have been discovered south of the active workings at Macassa."

The 'D' zone, near Maccassa's #3 shaft is closest to the Kirkland Lake West property. Kirkland Lake Gold (2007) describe the D zone as:

'It is a high-grade occurrence and strikes at right angles to the main ore zone. It is generally characterized by abundant visible gold plus tellurides with an upper element between the 3400 and 3800 level elevations, and, a lower element further east between the 4900 and 5300 foot

elevations. The lower D zone is characterized by pyrite mineralization rather than quartz veining but is thought to be along the same structure although a 2100 foot (640 m) gap between the two systems requires confirmation drilling.'

Consequently, new exploration on the Kirkland Lake West property has focussed on these two facets – the Main / 04 Break and the cross structures.

## 10.3 Exploration, Drilling and Recommendations:

Surface exploration on the Kirkland Lake West property commenced in the summer of 2004 with a linecutting program (74.1 km) contracted to Robert Craig of Rouyn, Quebec. Once the grid was in place, a program of check mapping was undertaken, followed by mechanical stripping, an induced polarization survey, and, diamond drilling (7 drillholes, 3,555 m) in 2004-05. After the joint venture agreement with Kirkland Lake Gold, underground exploration commenced on the 4750-ft level of the Macassa mine with a bypass drift and drift rehabilitation, and, diamond drilling (9 holes, 3,024 ft / 922 m).

The check mapping and supervision of the mechanical stripping program was undertaken by F. Ploeger of Queenston. The mechanical stripping was contracted to Wayne Phippen Contracting of King Kirkland, Ontario from September 14 to October 6, 2004. Two main areas were stripped. The 1983 work by Queenston Gold Mines was freshened and expanded in the northeast part of the property, and, a north-trending quartz vein zone in the southwest part of the property was excavated. The Main / 04 Break was exposed in the northeast part of the property along with portions of an altered, fractured and sheared, feldspar porphyry dyke some 120 m north of the break, and, two, north-trending cross faults exhibiting right-handed, lateral displacements in the order of 12.5 m. Chip samples from the Main / 04 Break environment yielded a best assay of 0.44 g/t from the main structure (balance less than 0.09 g/t), and, 0.09 g/t from the altered and sheared feldspar porphyry further north.

The second stripped area was located on a strong quartz vein trending at 327 degrees in the southwest part of the property within the mafic syenite stock. Some historic trenches and pits on the veining suggest early work dating to the Kirkland Gateway Mines Ltd. era in the 1930's (no records available). Two vein sets were located striking subparallel to the grid line (line 116 West). They were traced intermittently over some 200 m. Assay results were low.

In February, 2005, Insight Geophysics of Waterton, Ontario completed an Induced Polarization survey over the property. The time domain survey included a gradient array over the entire north-trending part of the grid, followed by an Insight array over selected lines (100 West, 62 West and

cross grid line 12 South), plus, a small gradient array over the north-trending quartz vein zone in the southwest part of the property. Plans for chargeability and apparent resistivity for the gradient array, and, sections to a depth of 1400 ft (425 m) showing chargeability and apparent resistivity for the Insight array accompany the report. Most of the geophysical features highlighted were subtle, but two features on the north-trending lines potentially warranted follow up.

Testing of selected geophysical targets followed via a surface drilling campaign of seven holes starting on April 12, 2005. Two contractors were used – Heath and Sherwood (1986) Inc. for holes 1, 2 and 6, and, Yost Drilling for drillholes 3, 4, 5 and 7. Both contractors were from Kirkland Lake, Ontario. Some 3,555 m were drilled in the seven holes. Core size was NQ. Drillholes were logged by Queenston personnel in the metric system, using a k-edit format and later transported into logii software. For drillhole locations refer to Fig. 6.

Drillholes KW-05-01, KW-05-02 and KW-05-05 targetted geophysical signatures in consort with the Main / 04 Break and potential cross structures. Holes KW-05-03, KW-05-04 and KW-05-07 were directed at the north-trending quartz vein zone in the southwest corner of the property, while hole KW-05-06 was a stratigraphic test of the Main / 04 Break east of the stripped area on surface.

Drillhole KW-05-01 tested a prominent high chargeability feature associated with a sharp resistivity break on line 100 West. The feature occurred near the interpreted position of the Main / 04 Break and a cross structure suggested from surface mapping. The hole collared in conglomeratic rocks with dykes of porphyritic syenite to 257.23 m, followed by Timiskaming wackes to the end of the hole. Faulting was noted at the conglomerate / wacke contact over 1.2 m (256.4-257.6 m), and, from 281.2 to 283.5 m – the latter feature being interpreted as the potential Main / 04 Break and the source of the geophysical anomaly. No significant gold values were encountered.

Hole KW-05-02 was drilled further east. It was designed to test a subtle north-trending structure from the geophysics and continue onward to the Main / 04 Break area. The hole was drilled at an oblique angle (295 degrees) to accomplish both goals. It collared in a package of trachytic tuff to 58.8 m, followed by a conglomerate and wacke assemblage that extended to the end of the drillhole – conglomerate dominant from 58.8-339.8 m, and, 610.7-1002 m. The sediments were cut by a series of porphyritic syenite and (near the end of the drillhole), mafic syenite dykes. Several narrow slips to gouges were noted in the system with two, more prominent areas at 608.45-610.70, and 717.13-726.24 m. The first intersection with mud gouge and a stronger ankerite alteration envelope appeared to be too early in the system for the Main / 04 Break, but,

in context with prior drilling and the oblique geometry, it was interpreted as the Main / 04 Break. Core angles were inconclusive. Erratic faulting and ankerite alteration occurred hanging wall to the first feature from 563.80-608.45 m. Best assays in the interval were 0.24 g/t over 1.45 m, from 609.25-610.70 m.

The second feature (717.13-726.24 m) was characterized by a series of narrow shears, broken and crushed zones with erratic shearing in the hanging wall from 653.17-717.13 m. Best assays in this interval were 0.63 g/t over 0.7 m, from 725.6-726.3 m. This sector occurred some 100 m down section from the Main / 04 Break and has a similar geometry to the results in hole KW-05-06 later in the program.

Elsewhere in hole KW-05-02, there were erratic pyritic, silicified and ankeritic sections with up to 4% disseminated pyrite. The best assay from this style of occurrence was 0.65 g/t over 0.70 m, from 143.3-144.0 m in a veined, porphyritic syenite dyke with traces of chalcopyrite and galena.

Drillholes KW-05-03, KW-05-04 and KW-05-07 targetted the north-trending quartz vein zones in the southwest part of the property. Holes KW-05-03 and KW-05-04 encountered two vein systems with local cataclastic textures and faulting developed, while hole KW-05-07 only intersected one vein section that appeared to correlate with the surface work. Gold values were not significant. Hole KW-05-07 was setup further east to provide a deeper intersection of the vein zone. It collared in mafic syenite similar to holes 3 and 4, but ended in a siltstone / fine tuff sequence from 271.2-300.0 m.

Drillhole KW-05-05 (azimuth 282 degrees) tested a north-trending geophysical feature crudely on strike with the target in hole KW-05-02 but with a prominent chargeability and an associated sharp break in the apparent resistivity. Unlike hole KW-05-02, the target was north of the interpreted Main / 04 Break. The hole collared in greywacke to 82 m, followed by conglomeratic rocks with isolated dykes of syenite to the end of the hole. At 290 m, a 4.5 m fault zone is interpreted to reflect the geophysical target (no significant gold values). Scattered quartz-carbonate vein zones are encountered in the hole without significant gold values. The best assay is related to a 1 m breccia zone at 338 m, assaying 85 ppb.

Drillhole KW-05-06 was planned as a test of the stratigraphy east of the main stripped area on surface. The drillhole collared in trachytic tuffs with local flows and dykes of syenite to 273.75 m. A lamprophyre dyke, from 273.75-275.65 m, marked the contact into sedimentary rocks with intercalated wackes and conglomerates continuing to the end of the drillhole. Erratic dykes of syenite were also found in the sedimentary package. Scattered narrow fault zones were relatively

frequent in the sediments, with two stronger features from 652.1-655.0 amd 878.0-880.1 m. Both of these zones were anomalous in gold content with 1.12 g/t over 1.4 m from 652.9-654.3 m, and, 0.88 g/t over 1.35 m from 878.75-880.10 m. A third, intervening narrow shear, from 834.35-834.95 m, assayed 3.11 g/t over 0.60 m.

The first structure in hole KW-05-06 had the strongest ankerite alteration, and, in context with historical drilling by Cyprus Canada, appears to be the best correlation with the Main / 04 Break. It has a perceived dip of 66 degrees south from the slightly oblique drilling angle. The true width is about 75% of the original intersection. The two lower intervals are some 130 to 165 m down section and their relationship with the surface data is unclear but a sheared dyke is noted some 120 m further north on surface.

Both drillholes KW-05-06 and KW-05-02 intersected the Main / 04 Break earlier than anticipated. This problem appears to be a function of drilling at oblique angles to the stratigraphy where the perceived dips are much shallower than true dips. The problem is complicated by the search for cross structures at right angles to the stratigraphy when core angles tend to be inconclusive. The 3D program should greatly assist in delimiting some of these targets.

Hole #	Coordinates	Az/	From	То	Width	True	Assay	Zone
	(feet)	Dip	(m)	(m)	(m)	Width	(g/t)	Comments
KW05-01	100+00W/6+22N	327/	256.4	257.6	1.2	n/a	NSV	Cross structure
		-62	281.2	283.5	2.3	n/a	NSV	Main / 04 break
KW05-02	64+74W/11+12S	295/	143.3	144.0	0.7	n/a	0.65	Pyritic section
		-60	609.3	610.7	1.4	n/a	0.24	Main / 04 break
			725.6	726.3	0.7	n/a	0.63	Unknown structure
KW05-03	115+36W/11+85S	283/ -48	76.0	88.1	12.1	9.3	NSV	Vein zone
KW05-04	115+36W/11+85S	237/ -50	69.8	73.2	3.4	2.1	NSV	Vein zone
KW05-05	58+95W/10+15N	282/ -52	289.5	294.0	4.5	n/a	NSV	Cross structure
KW05-06	68+40W/13+25S	348/ -68	652.9	654.3	1.4	1.1	1.12	Main / 04 break
		-00	834.4	835.0	0.6	n/a	3.11	Unknown structure
			878.8	880.1	1.3	n/a	0.88	Unknown structure

Table 5: Kirkland Lake West, Surface Drilling Results

KW05-07	112+00W/13+00S	237/	212.0	213.8	1.8	1.3	NSV	Vein zone
		-63						

n/a – indicates insufficient data to establish a true width NSV – no significant values

Post signing of the joint venture agreement, Kirkland Lake Gold acted as the operator for the underground work. Lac Minerals underground drillhole 47-391 (section 60 West, 4750-ft level), with 9.3 g/t over 6.7 m (1.7 m true width) in the Main / 04 Break was the primary target. The underground effort was established on the 4750-ft level of the Macassa mine and included a 235 ft (71.6 m) bypass drift around a timbered area and drift rehabilitation to current safety standards, followed by a 150 ft crosscut to facilitate diamond drilling, and, a nine hole drill campaign (3,024 ft / 922 m) from the end of the crosscut. The bypass drift, drift rehabilitation and crosscut were completed by Alex McIntyre and Associates of Kirkland Lake, Ontario. Diamond drilling was contracted to Heath and Sherwood (1986) Inc. of Kirkland Lake, between August 9th and September 6, 2006. Drillholes were logged by Kirkland Lake Gold personnel, supervised by S. Carmichael, P. Geo. and Chief Exploration Geologist. The drillholes were 'fanned' upwards from the end of the 150 ft crosscut.

All nine of the drillholes encountered the Main / 04 Break, with eight of the nine holes returning anomalous gold values. The 04 Break occurred primarily in mafic syenite, locally digressing into a unit of tuff at its footwall contact. The tuff unit (both contacts with mafic syenite) was 40 ft (12.2 m) thick, dipping 60 degrees south. Scattered dykes of syenite porphyry were also intersected within the system. A best assay of 0.33 oz/ton over a 2.2 ft core length (11.3 g/t over 0.67 m) occurred in drillhole 47-1202 related to a hanging-wall, quartz-carbonate vein along the core axis – true width estimate of only a few centimeters (cm). Hence none of the intersections can be considered as 'ore quality'.

The underground drilling results (after Carmichael, 2006) are tabulated as:

Hole #	Azimuth	Dip	Length	Intersection	Assay	Width	Zone Comments
			(ft)	(ft)	oz/ton	(ft)	
47-1201	186	+67	306	183.1-193.5	NSV	10.4	Main / 04 Break
				229.5-231.1	0.06	1.6	Hanging wall, pyrite
47-1202	201	+61	301	199.6-209.4	NSV	9.8	Main / 04 Break
				213.0-215.2	0.33	2.2	Hanging wall vein/04
				222.7-223.7	0.07	1.0	Hanging wall vein

				226.0-228.0	0.08	2.0	Hanging wall vein
47-1203	192	+52	287	195.5-206.3	LV	10.8	Main / 04 Break
	including			204.3-205.3	0.06	1.0	
				232.3-233.3	0.22	1.0	Hanging wall vein*
47-1204	186	+42	257	181.0-181.7	NSV	0.7	Main / 04 Break
				185.0-188.0	0.05	3.0	Main / 04 Break
47-1205	173	+45	257	159.4-159.7	NSV	0.3	Main / 04 Break
				153.6-155.0	0.10	1.4	Footwall to 04 / Main
				162.8-163.8	0.08	1.0	Hanging wall vein
47-1206	249	+79	407	293.9-294.4	NSV	0.5	Main / 04 Break
				319.3-322.4	0.11	3.1	Hanging wall vein
				340.4-341.4	0.22	1.0	Hanging wall vein
				343.5-345.5	0.08	2.0	Hanging wall vein
				380.5-382.3	0.11	1.8	Hanging wall vein
47-1207	050	+81	402	316.0-317.5	NSV	1.5	Main / 04 Break
47-1232	207	+44	402	245.0-250.2	NSV	5.2	Main / 04 Break
				271.5-275.0	0.08	3.5	Hanging wall, pyrite
47-1233	201	+28	405	224.7-224.9	NSV	0.2	Main / 04 Break

Results are presented in the Imperial system. Hole locations are all from the end of the crosscut at 60+45W / 9+40S (as surface grid) on the 4750 level. Since intersections were narrow, true widths were not estimated.

* - indicates the presence of visible gold in the sample (drillhole 47-1203)

NSV – no significant values

LV – low values in gold (related to overall location of Main / 04 Break in hole 47-1203)

Both the surface and underground exploration on the Kirkland Lake West property indicate that the important structures of the Kirkland Lake gold camp are present. Other than a small tonnage removed by Lac Minerals in 1991, no ore is currently developed. The knowledge gaps along strike and down dip are large and additional work is warranted. A 3D modelling of the property is recommended, given the number of structures present and the complexities of correlation via the geophysics in the surface program. The next phase of drift rehabilitation in preparation for further drilling commenced by the end of 2006. The gold environment is right and the results to date are sufficiently encouraging to continue exploration.

### 11.0 TECK A & B PROPERTY

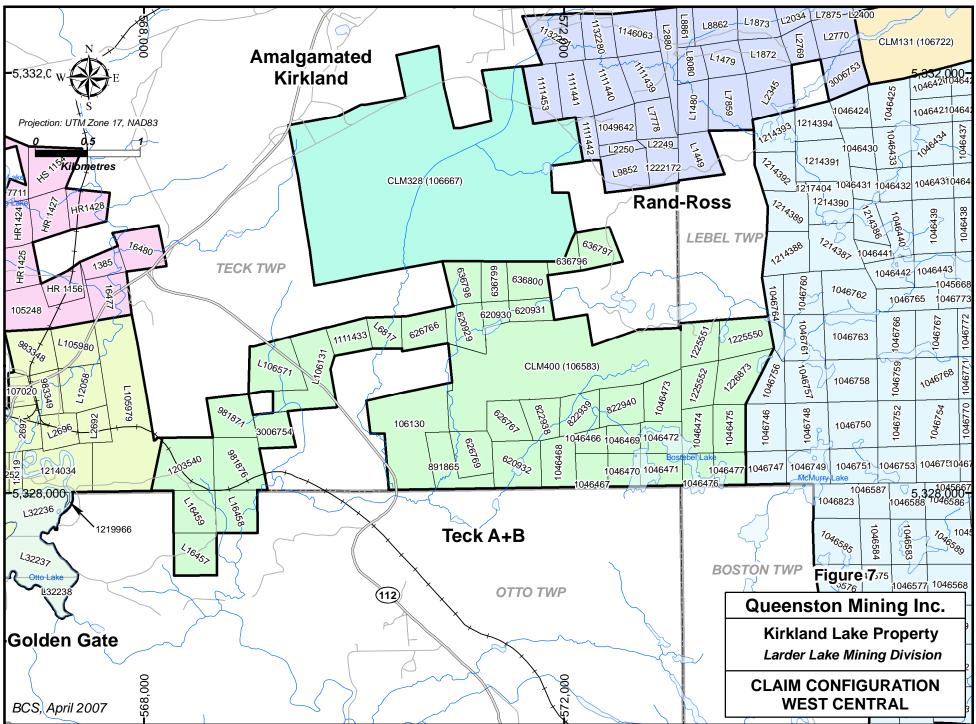
#### 11.1 Description, Location and History:

The Teck A & B property is a group of 59 claim units that provide a bridge between the Vigrass-Golden Gate property, the Amalgamated Kirkland property (north), and, the Lebel Stock property (east). Most of the group is in southeastern Teck Township with the three most southwesterly claims in Otto Township, and, eight claims forming the eastern margin in Lebel Township (Fig. 7). The three claims in Otto Township are patented for mining rights, with one patented claim in Teck Township (L6817) having mining rights and surface rights. There are four leases for mining rights comprising 17 claim units, and, 38 unpatented mining claims. Underlying 2% NSR royalties occur on 37 claims, plus an advance royalty on the patented claim in Teck Township. The claims are 100% owned by Queenston. All of the claims are subject to the Newmont royalty. Specifics, due dates and royalities are detailed in Appendix A.

The north part of the property, adjacent to the Amalgamated Kirkland lands, is covered by northtrending (349 degrees) grid lines spaced 200 ft apart. This grid was last established in 1991 over roughly twelve claim units. It has largely deteriorated over the years. In 1998, a six km reconnaissance grid was established in the northeast part of the claim group with a 2.4 km base line at 76 degrees and selected cross lines at 346 degrees over target areas.

Two shafts are located on the property. They are in the Lebel Township portion (claim 1225551) and are some 215 m apart. The #1 shaft, to the east, is 200 ft deep with 200 ft of lateral development on the 50 and 100-ft levels. The #2 shaft (west) was sunk to a depth of 100 ft, with no record of lateral development. Past production of copper 'ore' was suggested from the two shafts but data are difficult to validate. Muck piles were located during the reconnaissance survey in 1998, but the shafts were not found – the #1 shaft area being flooded by a beaver swamp, and, the #2 shaft hidden by the muck pile.

The property is primarily located in the southeastern corner of Teck Township. The west part of the property is accessible from Highway 112 and a series of logging trails east and west of the highway. Highway 112 extends southeast from Highway 66 some 3.5 km west of the town of Kirkland Lake. The Ontario Northland railway also crosses the southwest corner of the claims. The eastern part of the property is accessible via a poorly maintained track south from the town of Kirkland Lake across the Lakeshore tailings basin, along with local trails, skidoo routes and hydro lines.



The property has 20-30% bedrock exposure, with low-lying outcrops and more prominent ridges. The lands are also traversed by a number of creeks with open, swampy margins such that topographic relief is in the order of 50 m. Vegetation consists of immature spruce, fir, poplar, birch and jack pine, with alder swamps common to the creek margins / floodplains. Portions of the western claims have been recently logged.

Limited previous work is recorded on the Teck Township portion of the claim group prior to 1977, when the claims were staked by Jomi Minerals and Expediting Ltd., although a number of historic pits and trenches are noted in the field and shown on the geological map by Thomson (1948). Assessment data by Duffy, Hansen and Gray on the 'Duffy' showing area, in the southeastern part of Teck Township, are incomplete in the Resident Geologist's files. Very early work, however, is recorded in Lebel Township on the Dane copper prospect. The exploration history of the Teck A & B property is summarized as:

**1911-15**: Dane Mining; 2 shafts - #1 to 200 ft with 200 ft lateral development of the 50 and 100-ft levels, #2 to 100 ft; some 'ore' shipped between 1911 and 1913 (data on production unclear).

**1951**: Consular Harker Mines; #1 shaft dewatered, 2 x-ray drillholes.

**1952**: Bergey, W. R.; self-potential survey (Dane copper area).

1956: Iso Uranium Mines (option); #1 shaft dewatered, 5 drillholes (481 m).

**1963**: Duffy, Dennis; prospecting, stripping and trenching (the Duffy showing area).

**1968**: Hansen, Albert; 2 drillholes (62 m).

1969-70: Nucleonic Mines; 6 surface drillholes (614 m) – Lebel Twp.

1971: Gray, James; 4 drillholes (123 m).

1974-76: Duffy, Dennis; stripping, trenching.

**1977-81**: Jomi Minerals and Expediting Ltd; prospecting, magnetic, radiometric and VLF-EM surveys.

1982: Labrador Exploration; mapping, magnetic, HLEM surveys; 5 drillholes (594 m).

**1985**: Rio Algom Exploration; prospecting, IP survey; 4 drillholes (653.5 m).

**1988-89**: HSK Minerals; mapping, soil geochem, magnetic, VLF and IP surveys; discover 'DK' showing.

**1989-91**: Battle Mountain Canada; airborne magnetic and VLF-EM survey; ground magnetic,

VLF, overburden stripping, sampling, mapping surveys; 3 drillholes (348 m).

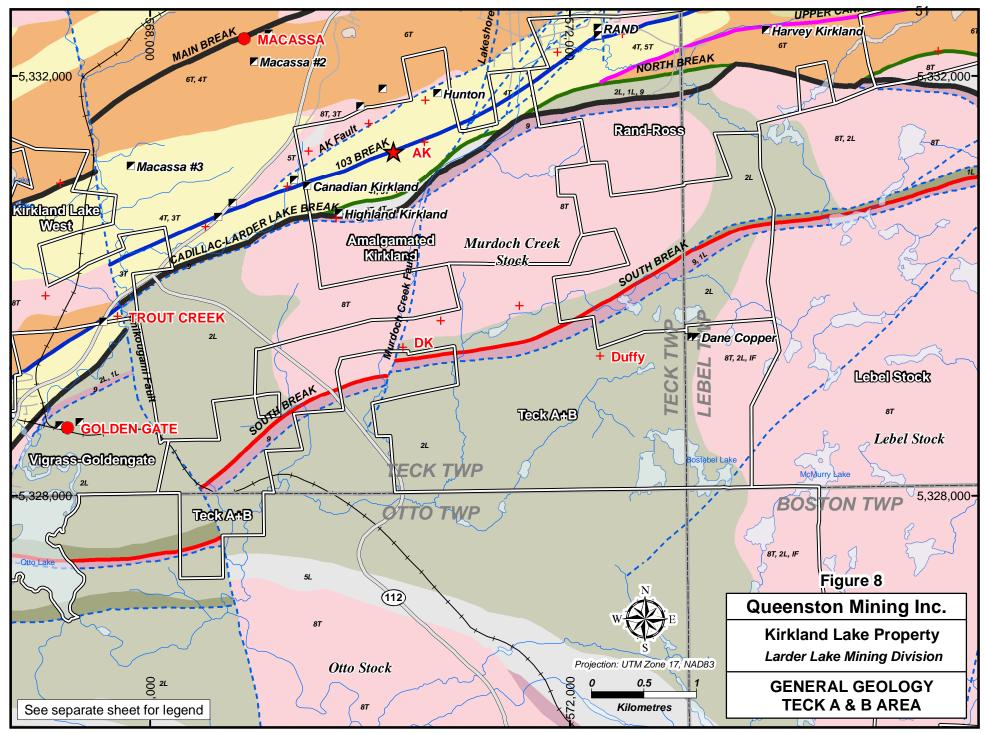
**1990**: Crichton, R.; 3 drillholes (137 m) in Lebel Twp.

**1996-2001**: Queenston – Franco-Nevada joint venture; reconnaissance mapping (1998). **2002-06**: Queenston Mining; no exploration.

No historic or current mineral resources occur on the property.

# 11.2 Property Geology and Mineralization:

The Teck A & B property occurs south of the Cadillac-Larder Lake Break in Tisdale assemblage mafic and ultramafic volcanics with narrow horizons of iron formation. The northern margins of the property are underlain by a syenite stock, named the Murdoch Creek Stock (Fig. 8). It is some 4.5



by 1.5 km in size, elongated parallel to the regional, east-northeast trending deformation fabric. The eastern limits of the property are cut by the Lebel stock, a more ovoid syenite body some 6.5 by 7 km in dimension that dominates the south part of Lebel and the north part of Boston Township (Fig 8). Both syenite stocks have contaminated margins (mafic syenite portions) and variably developed contact aureoles with amphibolitization and epidote alteration common.

Adjacent to the Murdoch Creek Stock, the Tisdale assemblage has a primary east-northeast foliation to layering, while adjacent to the Lebel Stock, the rocks exhibit a more northerly strike that appears to be partly a function of the implacement of the syenite body.

Aside from the dislocation related to the syenite intrusions, the main structure on the property is the South Break. From the magnetics, the break is interpreted to occur on the Otto Township claims, thence offset along the Amikougami cross fault into Teck Township. In Teck Township, the break skirts the south contact of the Murdoch Creek Stock. It tracks across the northern third of the claim group and exits eastward. At the Lebel Township boundary, the South Break is some 600 m north of the claim group (Fig. 8).

The South Break is also offset by the Murdoch Creek Fault. The fault trends northerly along Murdoch Creek in this area and has a suggested left-handed lateral displacement of the stock and the South Break of some 200 m. The relationship between the Murdoch Creek Fault and the Amikougami Fault (to the west) is unclear but both are later, north-trending features with left-hand lateral displacements.

The South Break environment, south of the Murdoch Creek syenite was the primary focus of exploration between 1977 and 1991. It is characterized by zones of intense shearing, chlorite-talc-carbonate alteration and local syntectonic syenite dykes. It has a suggested sphere of influence approaching 600 m, similar to the South Break on the Vigrass-Golden Gate lands. In 1988, HSK Minerals Ltd. discovered the 'DK' showing associated with a mineralized pod/dyke of mafic syenite within sheared volcanics (Fig. 8). Grab samples from the showing assayed up to 13.66 g/t with surface channel samples up to 6.44 g/t over 3.12 m (Benham, 1991). Mechanical stripping and diamond drilling showed the mineralization to be of limited extent, and, no other work has been undertaken since that period.

Further south (300 m), and some 2 km east of the DK showing, the historic Duffy showing was investigated in 1998 as part of a reconnaissance mapping program (Fig. 8). At the showing, east to east-northeast trending, massive quartz veins up to 15 m thick accompanied by strong

alteration, shearing and felsic intrusives locally convert the ultramafic flows to green carbonate over an area of 75 by 150 m. No anomalous gold values were encountered.

The Dane copper prospect, further east of the Duffy showing along the regional deformation trend in Lebel Township, was also visited as part of the 1998 reconnaissance program. The westernmost shaft (#2) was sunk on an east-northeast trending quartz vein with chalcopyrite mineralization. The dimensions of the zone are unclear but the quartz-rich muck pile is in the order of 15 by 25 m, and, a previous drillhole intersected 2.4 m of vein material at a vertical depth of 23 m. No significant gold values were found in the survey but two grab samples from the quartz-rich muck pile assayed 5.14% and 8.75% copper.

The #1, or easternmost shaft of the Dane copper prospect recorded some production between 1911 and 1913. Unlike the #2 area, the mineralization is associated with a north-trending iron formation unit that is mineralized with pyrite, pyrrhotite and chalcopyrite. Assays up to 9.72% copper over 3 ft (0.9 m) are noted in the Resident Geologist's files but data are incomplete. Gold values are reported as minimal.

### 11.3 Exploration, Drilling and Recommendations:

Since the 1998 reconnaissance mapping program under the Queenston – Franco-Nevada joint venture, no exploration has been undertaken on the property. The South Break environment certainly has merit for further exploration but results to date in context with other targets on the Queenston lands has lowered the priority for further work on the Teck A & B property in the short term.

### 12.0 AMALGAMATED KIRKLAND PROPERTY

### 12.1 Description, Location and History:

The Amalgamated Kirkland (or AK) property consists of 27 mining claim units held under lease (CLM 328) in southeastern Teck Township (Fig. 7). The lease is for mining rights only. It is due to expire on June 1, 2012, but is renewable. Most of the surface rights in the area are owned by the Corporation of the Town of Kirkland Lake. The property is contiguous with the Teck A & B property (south), and the Rand-Ross property (east) and includes parts of the former Amalgamated Kirkland and Florena properties outlined on the historic map of Teck Township

compiled by Thomson (1948) in 1945. A 0.61% NSR royalty is held by the original vendors, in addition to the Newmont royalty.

The property is covered by north trending (341 degrees) grid lines spaced 100 m apart. Three shafts are located on the Amalgamated Kirkland property: the Hunton shaft (north) to 500 ft (152 m) with an internal winze from the 375-ft to the 750-ft level; the Canadian Kirkland shaft (west) to 100 ft (30 m), and; the Highland Kirkland inclined shaft (south) to 100 ft (30 m) with some development on the 60-ft level. No level development is listed for the Canadian Kirkland shaft. Levels were established at 125, 250, 375, 500, 625 and 750 ft from the Hunton shaft although the amount of development on the 625-ft and 750-ft levels is unclear. The Hunton shaft is capped, the Canadian Kirkland and Highland Kirkland shafts are filled with waste rock.

The property occurs within the town of Kirkland Lake and is located south and west of the residential area. Archer Drive cuts across the north part of the property and provides ready access for exploration. Highway 66, the main transportation artery into Kirkland Lake, just cuts the northwestern corner of the claim group at the junction with Archer Drive. A series of both active and abandoned Hydro lines with related trails provide further off-road access.

The northern third of the Amalgamated Kirkland property has been effectively cleared through the presence of Hydro lines, a natural gas pipeline, and, Archer Drive, a roadway constructed by the Town of Kirkland Lake for the development of industrial land south and west of the residential area. South of Archer Drive, there is some 20% bedrock exposure from low-lying outcrops to more prominent ridges with up to 30 m of relief. Murdoch Creek bisects the southern two thirds of the property but swings more easterly to northeast before reaching Archer Drive in the northeast corner of the property. Outcrop and better-drained areas support immature growths of poplar, birch and spruce, with alders, black spruce and larch in low-lying ground, particularly around Murdoch Creek. Portions of the property can be operated on a year-round basis although the wet swampy lands within and around Murdoch Creek are best approached in the winter months.

The history of the Amalgamated Kirkland property dates from the earliest days of the Kirkland Lake gold camp and is summarized as:

**1911-13**: Hunton Gold Mines incorporated (1913) on a claim staked in 1911; surface trenching. **1920-25**: Hunton Gold Mines; shaft to 400 ft, levels at 125, 250 and 375 ft; north crosscut started on 375-ft level (main exploration level with 550 m development and 1,220 m diamond drilling); further surface and underground drilling.

**1921**: Canadian Kirkland Mines; shaft to 100 ft on current AK property; further work immediately west of claim group reported as shaft to 816 ft, levels at 80, 250, 400, 800 ft with 641 m lateral development, and; a third shaft some 610 m west with 122 m lateral development on 65 and 125 ft levels; 2,439 m of diamond drilling to 1939 (?) – separate from Hunton property.

**1922-23**: Highland Kirkland Gold Mines; 4 drillholes (977 m), 1,220 m surface trenching, inclined shaft to 100 ft (at –65 degrees) with some development on 60-ft level – south and east of Canadian Kirkland and Hunton prospects in Tisdale assemblage rocks.

**1925-39**: Kirkland Hunton Gold Mines; inclined winze from 375-ft to 675-ft level (1925), later extended to 750-ft level; shaft deepened to 500 ft (1928); 476 m underground development, 2,918 m of diamond drilling.

**1936-37**: Florena Kirkland Gold Mines; magnetic survey, 7 surface drillholes (2,396 m) on previous Highland Kirkland ground.

**1939-44**: Amalgamated Kirkland Mines (incorporated 1939) as amalgamation of Hunton, Honer and Canadian Kirkland lands (10 claims of current group); 27 surface drillholes (3,724 m); crosscut from Macassa 3000-ft level extended toward Amalgamated ground, 2 drillholes (844 m) drilled in 1944.

1945: Frobisher Exploration; 14 surface holes (1,305 m) on Amalgamated lands.

**1972**: Mayfield Explorations and Development; 11 surface drillholes (855 m).

1973: Orme Prospecting Syndicate; one drillhole (37 m) under Highland Kirkland inclined shaft.

**1974**: Kerr Addison Mines; magnetic surveys, mapping, trenching, 4 surface holes (101 m) into carb rocks.

**1978**: Newmont Exploration of Canada; geophysics (includes IP), mapping, 7 drillholes (1,903 m) on former Highland Kirkland / Florena property.

1981: Lampe Resources; one surface drillhole (61 m).

1983-84: Eden Rock Mineral Corp; three drillholes (359 m).

**1986**: Accord Resources; stripping, sampling at Hunton area.

**1989**: Queenston Gold Mines acquires current claim group.

**1989-92**: Battle Mountain Canada; airborne magnetic and VLF-EM survey; ground magnetic and IP surveys, mapping, stripping / trenching, 45 drillholes (11,838 m), AK Zone discovered. **1993-95**: Cyprus Canada; mapping, 23 drillholes and extensions (14,368 m); first resource

estimate.

1996: Canadian Golden Dragon Resources; three drillholes (1,721 m).

**1997-98**: property sold to Franco-Nevada (1997); property becomes part of Kirkland Lake Joint Venture (Queenston – Franco-Nevada) in 1998; no new work undertaken.

**2002-03**: Queenston purchased Franco-Nevada (then Newmont Mining Corp) interest; 3,010.7 m surface drilling in 7 holes.

**2005**: Queenston; 7 drillholes and a deepening of a prior Cyprus drillhole (6,126 m).

Recent work has focused on the AK Zone discovered by Battle Mountain Canada between 1989 and 1992, and, the north-trending cross structures discovered by Kirkland Lake Gold (north) in 2003. The first resource calculation on the AK Zone was attempted by Cyprus Canada Inc. in 1994. Neither production nor resources are reported around the more extensive development at the Hunton shaft.

### 12.2 Mineral Resources:

A resource estimate was first attempted by Cyprus Canada Inc. (Cyprus) in 1994. RPA (1996) discussed the "global geological resource" identified by Cyprus as "preliminary estimates" since block outlines and drillhole intercepts were not available to RPA at the time of writing, and, the methodology was unclear. Cyprus indicated 1.8 million t grading 5.5 g/t gold, including 1.3 million t at 6.8 g/t. In 1997, Queenston reinterpreted the geology and completed a revised, inferred, mineral resource estimate of 2,639,338 t grading 4.46 g/t with a core interval of 1,716,025 t grading 5.59 g/t. The calculation included a second zone of 337,009 t grading 5.4 g/t on a related structure – the 102 Break. Queenston used a cutoff grade of 2 g/t over a true thickness of 2.0 m.

Cutoff grades, drillhole intercepts and minimum true widths remain unclear for the Cyprus calculation. Both calculations used a specific gravity of 2.78, and, both were uncut.

Queenston had the benefit of three additional holes drilled by Golden Dragon Resources in 1996, two of which intersected the mineralized zone with 7.31g/t over 4.6 m (hole AK-70), and, 2.77 g/t over 8.5 m (hole AK-71). The Queenston calculation used a block modelling method on a vertical longitudinal section. Most of the blocks contained multiple intersections, due to the scale of the longitudinal and the closeness of some of the drillholes. Average grades and thicknesses were subsequently determined from the multiple intersections for the blocks. While the zone is lozenge shaped and does not lend itself to a block modelling approach, the calculation was sensitive to the plunge of the mineralizing system, estimated at 25 to 30 degrees west.

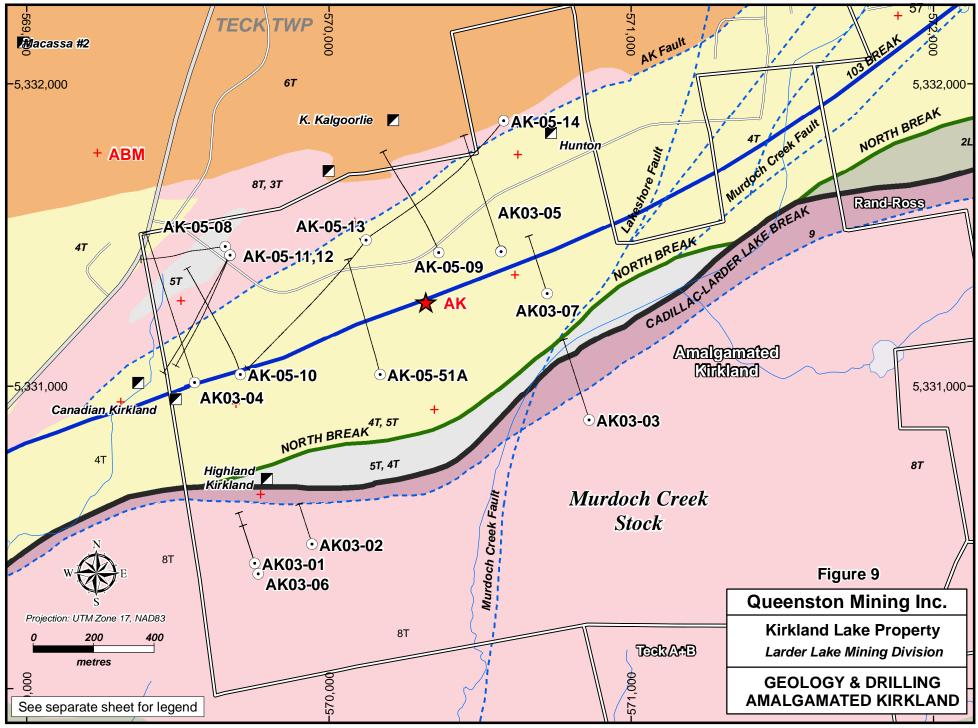
Queenston's inferred mineral resource of 2,639,338 t grading 4.46 g/t is considered more representative of the mineralization, although the cutoff grade is low and a contour method would better refine the volumes used. Further, Queenston's core interval of 1.7 million t grading 5.59 g/t is comparable with the earlier Cyprus calculation of 1.8 million t grading 5.5 g/t.

The Queenston mineral resource calculation on the AK Zone is regarded as historic since it was completed prior to NI 43-101. It should not be relied upon as it has not been verified by a Qualified Person.

### 12.3 Property Geology and Mineralization:

The Amalgamated Kirkland property is essentially bisected by the Cadillac-Larder Lake Break. In this area, the break follows the northern fringe of the Murdoch Creek Stock (syenite) and is represented by sheared ultramafics and green carbonate rocks of the Tisdale assemblage with local shearing in the adjacent Timiskaming suite to the north (Fig. 9). The Tisdale assemblage is best developed in the eastern part of the property, but occurs as a relatively thin veneer (to 200 m thick) around the north contact of the Murdoch Creek Stock. The Timiskaming assemblage is dominated by fine to coarse clastic sedimentary rocks with lesser alkalic volcanics including fine to coarse pyroclastics, flows and intrusives.

The Murdoch Creek syenite stock trends parallel to the regional deformation fabric and is the dominant feature in the south part of the property. Its north contact is less contaminated than the southern contact on the Teck A & B lands but mafic syenite sections and carb rocks are found within the system and in the contact aureole. Other syntectonic syenites are found in the north



BCS, July 2007

part of the property – most prominent at the Hunton shaft area (north). Late Matachewan diabase dykes are also present (Fig. 9).

Vincent (2006), illustrated that a number of east-northeast trending structures and north trending cross structures are present on the Macassa property to the north. Similarly, a series of eastnortheast trending (70 degrees) breaks are interpreted on the Amalgamated Kirkland property from the geophysics, geological mapping and diamond drilling. These structures are commonly identified by their grid location. Some nine features are suggested from prior work by Battle Mountain Canada. The AK Zone relates to the 103 Break. It is located some 300 m north of the 100+00 N base line, while mineralization at the Hunton shaft is along the 107 Break roughly 400 m north of the AK zone and 700 m north of the base line. Developments on the Canadian Kirkland lands (west) are correlated with the 101 and 102 Breaks. A poorly defined feature, the 99 Break, lies north of the Cadillac-Larder Lake Break. It is tentatively identified as the origins of the North Break, and, is more fully described on the Rand-Ross property. Gold mineralization tends to have an affinity for the trachytic and syenitic portions of the sequence.

The northeast to north-northeast trending Murdoch Creek Fault is one of the latest structures in the area. It also roughly bisects the property and exhibits a left-hand offset of the Cadillac-Larder Lake Break in the order of 200 m. North of the Murdoch Creek syenite, the fault becomes more northeasterly in strike and consists of a series of sheared and mylonitized zones. Thomson (1948), notes that assays up to \$2.65 gold (2.6 g/t) are reported from the fault zone but its relationship with the cross structures recently discovered by Kirkland Lake Gold Inc. and the historic, north trending Lakeshore Fault (further north) is unclear. The nearest cross structure identified by Kirkland Lake Gold (2007) is the ABM zone near the northwest corner of the Amalgamated Kirkland property with an initial intersection of 0.50 oz/ton over 29 ft core length (17.1 g/t over 8.8 m), circa the 200-foot elevation (Fig. 9).

The trace of the 103 Break across the Murdoch Creek fault system is considered interpretive in nature with the current dataset.

One further shear zone, the historic Amalgamated Kirkland / Hunton fault (labelled as the AK Fault on the geology plan – Fig. 9), is interpreted to be a splay feature between the 103 Break and the northeasterly trending arm of the Murdoch Creek Fault. The AK Fault clips the northwestern corner of the claim group and trends northeasterly through the Hunton shaft area before leaving the property.

The vast majority of previous work has focused on the northwest quarter of the property, north of the Cadillac-Larder Lake Break, and, west of the Murdoch Creek Fault. This quarter includes the AK, Hunton and Canadian Kirkland mineralized zones. There is only limited exploration elsewhere on the property. Stevenson et al (1994) describe the AK deposit as:

'The AK deposit consists of lode-style gold mineralization hosted by altered and pyritic Timiskaming trachytic volcanics. The volcanics wedge out or thin at depth between two sedimentary units. The zone strikes at 070 degrees, dips steeply south, and, exhibits a westerly plunge of 50 degrees.

Mineralization is characterized by blue-grey, brecciated and 'wormy', quartz-ankerite veins which contain up to 10% fine-grained pyrite and lesser amounts of galena, chalcopyrite, sphalerite, molybdenite and visible gold. The sulphides and gold commonly occur along fractures and wallrock inclusions in the veins. Native gold occurs as fine pinpoints distributed in one to five mm sized clusters of up to ten or more grains. Auriferous veins are found within a quartz-ankerite-sericite-pyrite alteration assemblage that is enveloped by a broader zone of ankerite-sericite-pyrite +/- hematite and quartz alteration up to 60 m wide. The regional alteration assemblage is greenschist facies, typified by chlorite-calcite alteration.'

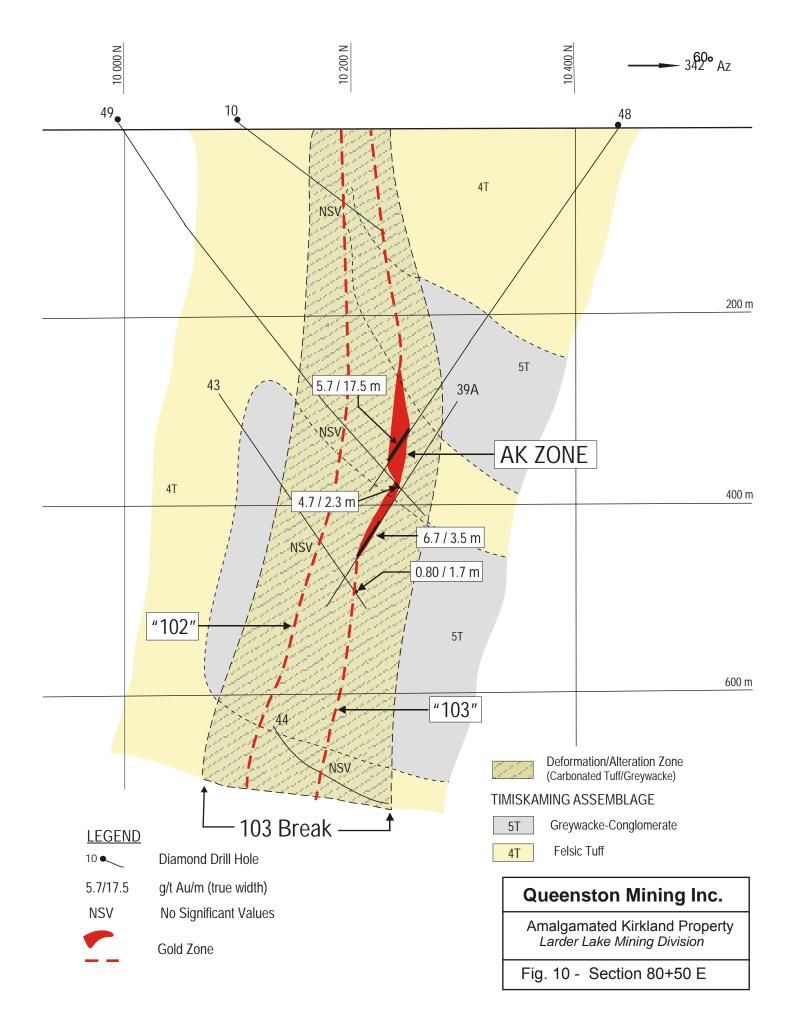
A generalized section of the AK zone follows (Fig. 10).

Less is known about the specifics of the mineralized zones in the Hunton workings, but gouged and sheared zones are mentioned in the literature (Thomson, 1948) with better mineralization related to sheared and/or brecciated syenite porphyry bodies around the shaft and some 245 m further north. Two main veins are noted in a 60 to 100 m syenite body at the Hunton shaft.

### 12.4 Exploration, Drilling and Recommendations:

Exploration on the Amalgamated Kirkland property covered in this report, commenced in February 2003 with the first of two phases of surface diamond drilling. Seven holes (3,010.7 m) were drilled between February 24 and December 3, 2003, and, seven further holes plus deepening of a prior Cyprus drillhole (6,126 m) were completed between February 14 and August 19, 2005. Some 9,136.7 m were drilled in the two phases under contract with Heath and Sherwood (1986) Inc. of Kirkland Lake, Ontario. The core size was NQ. Hole locations are shown on Fig. 9.

Drillholes were spotted via grid coordinates in the field, supplemented by GPS when grid conditions were less than ideal. Holes were logged by Queenston personnel, in the metric system, using a k-edit format and later transported into logii software. Elevations were estimated from information in the extensive database available on the AK property.



The priorities of the drill campaigns varied over the time period, as the mineralized cross structures discovered by Kirkland Lake Gold Inc. on the Macassa property in 2003, were unknown at the start of the program. The first campaign was designed to drill the underexplored, Cadillac-Larder Lake Break environment, and, to test the northwest part of the property at depth where previously, there was little deep exploration data along the AK Fault. The last two holes of the program followed up results in the first five holes.

The second drilling phase was more mindful of the north-trending structures on the adjacent Macassa claims, in that five of the drillholes targeted north-trending structures. The remaining two holes and deepening of a third continued to test the east-northeast trending structures at depth.

In the first phase, drillholes AK-03-01, AK-03-02 and AK-03-03, followed up by AK-03-06 sectioned the Cadillac-Larder Lake Break at the north contact of the Murdoch Creek syenite. The selection of the test areas was guided by IP surveys completed by Newmont Exploration in 1978. Holes AK-03-01, AK-03-02 and AK-03-06 were in the southwest part of the property targeting the break in the Highland Kirkland shaft area, while hole AK-03-03 was located east of the Murdoch Creek Fault in the southeast quarter of the property. Drillhole AK-03-04 was drilled in the western part of the property beneath a number of shallow holes drilled by Amalgamated Kirkland Mines Ltd. along the AK Fault during the period 1939 to 1944. Hole AK-03-05 sectioned a similar environment 1,100 m east of hole AK-03-04 and west of the Hunton shaft. Drillhole AK-03-07, was a follow-up hole, 100 m east and south of AK-03-05.

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	Zone
	(m)		(m)	(m)	(m)	Width	(g/t)	Comments
AK-03-01	7400E/9600N	-50	172.8	205.2	32.4	32.2	0.84	CLLB
	including		172.8	175.9	3.1	3.1	2.42	
	and		180.6	190.1	9.5	9.4	1.39	
AK-03-02	7600E/9600N	-50	140.7	144.3	3.6	3.6	0.28	CLLB
AK-03-03	8600E/9700N	-50					NSV	CLLB
AK-03-04	7400E/10230N	-60	263.7	271.0	7.3	6.4	0.56	AK Fault
	including		263.7	264.1	0.4	0.4	4.65	
			293.6	294.6	1.0	0.8	1.56	105 Break
			307.9	309.7	1.8	1.5	1.66	105 Break
			373.8	376.5	2.7	2.3	0.71	106 Break
			393.1	394.8	1.7	1.4	1.75	106 Break
			654.3	655.4	1.2	0.9	3.94	Above 107 Break

Table 7: Amalgamated Kirkland Drilling Results, Phase I

			670.2	677.7	7.5	5.9	1.01	107 Break
AK-03-05	8500E/10322N	-55	34.4	36.4	2.0	1.3	4.17	104 Break
	including		35.0	35.5	0.5	0.3	17.72	
			397.1	403.8	6.7	6.1	0.44	AK Fault ?
	including		399.6	400.6	1.0	0.9	1.49	
			469.9	475.0	5.1	4.0	0.65	Above 107 Break
	including		472.7	473.8	1.1	0.9	1.51	
			483.4	493.2	9.8	7.7	0.88	107 Break
	including		486.0	490.9	4.9	3.9	1.27	
AK-03-06	7400E/9563N	-62	258.0	262.2	4.2	4.2	0.25	CLLB
AK-03-07	8600E/10140N	-72	341.0	343.1	2.1	1.3	0.38	104 Break ?

CLLB – Cadillac-Larder Lake Break

NSV - no significant values

The break designations follow the parameters outlined under the Property Geology and Mineralization section.

The Cadillac-Larder Lake Break target in the Phase I drilling was highlighted by a broad lowgrade zone of gold mineralization in hole AK-03-01 assaying 0.84 g/t over 32.2 m, with up to 2.42 g/t over 3.1 m. Comparable mineralization in drillhole AK-03-02 (200 m east), and AK-03-06 (below hole AK-03-01) was not as well developed with sections of 0.28 g/t over 3.6 m in hole AK-03-02, and, 0.25 g/t over 4.2 m in hole AK-03-06. The host rock consisted of silicified, ankeritic, sericitic and pyritic tuffs and basalt, followed by some green carbonate units footwall (north) of the Murdoch Creek Stock. Drillhole AK-03-03, drilled on the Cadillac-Larder Lake Break target east of the Murdoch Creek cross fault, did not encounter significant gold values.

Drillholes AK-03-04 and AK-03-05 intersecteded multiple structures that were anomalous in gold content. The Amalgamated Kirkland (AK) Fault was encountered in both drillholes assaying 0.56 g/t over 6.4 m in AK-03-04, with a best section of 4.65 g/t over 0.4 m, and; 0.44 g/t over 6.1 m, including 1.51 g/t over 0.9 m in AK-03-05. Other structures with assays greater than 1 g/t were highlighted by 3.94 g/t over 0.9 m above the 107 Break in hole AK-03-04, and; 17.72 g/t over 0.3 m tied to the 104 Break structure in AK-03-05.

The interval from 307.9-309.7 m, in drillhole AK-03-04 is noteworthy, in that it is at a very shallow angle to the core axis. Assaying 1.66 g/t over a core length of 1.8 m, the zone may represent the first indications of cross structures within the system.

Assay results in drillhole AK-03-07 were low.

In the second phase of drilling, holes AK-05-08, AK-05-11, AK-05-12, AK-05-13 and AK-05-14 were primarily drilled to test for north-trending structures, identified as 'ore-bearing' on the adjoining Macassa property to the north (example the ABM Zone) – Fig. 9. Holes AK-05-09, AK-05-10 and the deepening of Cyprus drillhole 51 (called 51A) continued the deeper tests of the stratigraphy. Drillhole 51A, was extended past the previously intersected 103 Zone (1.98 g/t gold over 2.0 m true thickness).

Drilling for north-trending structures was at oblique angles to the stratigraphy and was complicated by the number of east-northeast trending structures indicated from surface mapping, geophysics and prior drillholes. Narrow gouged and faulted sections were common in the drilling albeit not all had associated alteration and mineralization. Core angles were often inconclusive. Due to the uncertain attitude of the structures intersected, true widths of the mineralized intervals were not determined.

Hole #	Coordinates	Az.	Dip	From	То	Width	Assay	Zone
	(m)			(m)	(m)	(m)	(g/t)	Comments
AK-05-08	7650E/106+36N	262	-65	189.8	192.5	2.7	0.95	Syenite – ENE
				227.1	231.3	4.2	1.03	Syenite – ENE
				348.6	351.1	2.5	1.70	Syenite – ENE
	including			350.0	351.1	1.1	3.31	
				505.5	509.0	3.5	1.30	Cross structure
	including			505.5	506.4	0.9	4.20	
				638.4	639.7	1.3	1.32	Unknown structure
AK-05-09	8300E/103+90N	341	-75	293.0	294.5	1.5	2.04	AK Fault
				729.0	729.9	0.9	1.17	Unknown break
AK0551A	7996E/100+63N	344	-63	578.0	596.6	18.6	NSV	Altered / faulting
AK-05-10	7500E/100+30N	342	-75	962.7	963.7	1.0	3.31	AK Zone
				991.0	994.0	3.0	0.60	AK Zone
AK-05-11	7656E/106+04N	202	-55	305.3	308.9	3.6	0.56	Syenite – ENE
				366.6	369.9	3.3	0.59	Syenite – ENE
				437.8	438.8	1.0	1.10	Syenite – ENE
				444.0	447.4	3.4	0.49	Syenite – ENE
				463.3	474.7	11.4	0.45	Syenite – veined
	including			464.0	465.1	1.1	1.39	

Table 8: Amalgamated Kirkland Drilling Results, Phase II

	and			472.5	473.1	0.6	1.02	
AK-05-12	7656E/106+04N	211	-45	290.9	293.7	2.8	0.58	Syenite – ENE
	including			290.9	291.9	1.0	1.04	
				363.2	372.4	9.2	0.25	Syenite – ENE
AK-05-13	8100E/105+00N	217	-50	9.4	10.1	0.7	0.84	105 Break ?
				635.2	636.5	1.3	0.92	Unknown structure
AK-05-14	8652E/107+50N	223	-50	153.3	153.7	0.4	3.18	Mafic syenite
				211.6	219.0	7.4	0.74	Syenite – ENE
	including			213.0	214.2	1.2	1.16	
				217.7	219.0	1.3	1.59	Syenite – ENE
				242.3	246.0	3.7	0.71	Syenite – altered
				250.5	253.8	3.3	0.48	Mafic syenite
				329.4	330.2	0.8	1.72	Mafic syenite
				419.2	421.3	2.1	1.28	Mafic syenite
				727.0	736.7	9.7	0.40	Syenite – deformed
	including			734.5	735.7	1.2	0.99	
				739.9	743.0	3.1	1.97	Pyritic zone – ENE
	including			740.6	741.4	0.8	5.49	
				793.0	794.3	1.3	0.73	Syenite – ENE

NSV - no significant values

The table highlights the accessory number of anomalous assays in cross-structure drillholes AK-05-08, AK-05-11, AK-05-12 and AK-05-14. These four holes are all collared in the north part of the property where a series of syntectonic syenite dykes are associated with the east-northeast trending breaks (105, 106, 107), along with the AK Fault. The syenite hosted mineralization is interpreted to be related to these east-northeast trending structures as identified on the table. Hole AK-05-13 is located further south from the sphere of influence of the syenite dykes and has fewer anomalous gold values.

Drillhole AK-05-11 contains a zone of quartz veining with anomalous pyrite (0.45 g/t over 11.4 m) in a syenite host from 463.3-474.7 m. The veins are at relatively steep angles to the core axis (50-75 degrees), but are not encountered in hole AK-05-12 drilled from the same collar as AK-05-11 and directly above the favourable horizon. A narrower, anomalous corridor in hole AK-05-12, from 363.2-372.4 m (0.25 g/t over 9.2 m), is suggested to be the up-dip expression of the mineralization in hole AK-05-11. That correlation yields a core angle of less than 25 degrees.

Thus the mineralization in holes AK-05-11 and AK-05-12 is interpreted to be related to an eastnortheast trending structure.

The pyritic zone in drillhole AK-05-14 (739.9-743.0 m) at 1.97 g/t over 3.1 m, is similar. The general deformation fabric within and surrounding the zone is at shallow angles to the core axis although both contacts of the unit are with gouge at 35/60 degrees.

The only feature to be interpreted as a cross structure in the second phase of drilling was the carbonated fault zone with up to 7-10% pyrite in hole AK-05-08 from 505.5-509.0 m, assaying 1.3 g/t over 3.5 m. It is potentially the down-dip expression of the Kirkland Lake Gold Inc. ABM Zone, but currently there is insufficient data for validation. Core angles are consistently at 40-45 degrees in this area and inconclusive. The intersection is footwall (i.e. northwest) of the AK Fault / splay structure in the northwest corner of the property. There are no other drilholes in this part of the stratigraphy.

Although data from the oblique drillholes aimed at cross structures are difficult to correlate, the exercise provided additional information on the mineralizing systems. The property is a candidate for 3D computer modelling which is underway at this point. The modelling will help sort regional deformation structures from cross structures and will also assist in the planned upgrading of the historic resources to NI 43-101 standards. As new targets are expected from the modelling program, further exploration should await those results.

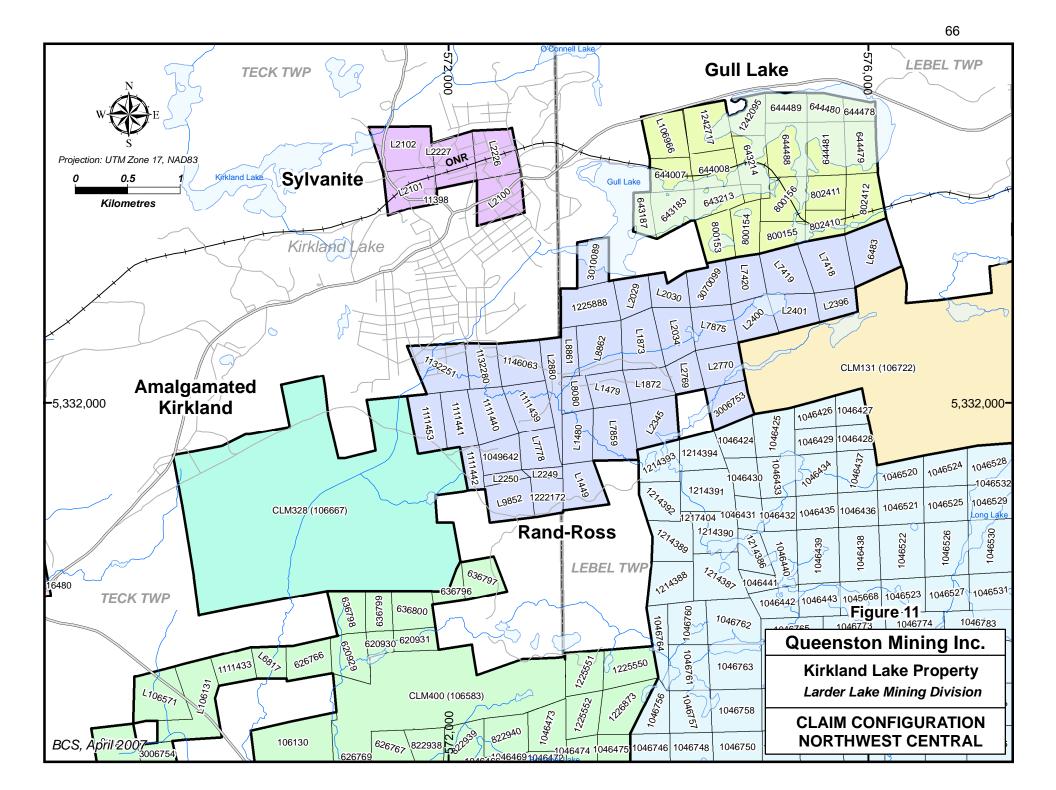
### **13.0 SYLVANITE PROPERTY**

### **13.1 Description, Location and History:**

The Sylvanite property consists of five patented claims in east central Teck Township (Fig. 11). The claims are patented for mining rights only and are 100% owned by Queenston Mining Inc. The Newmont royalty applies. This group is dislocated from the main body of contiguous Queenston claims further south.

Currently, there is no established grid on the property.

The Sylvanite mine is a past producer near the eastern end of the Kirkland Lake gold camp. The site contains four shafts. The #2 shaft to 3,642 ft (1110 m), with an internal winze from the 3150-ft level to 5,550 ft (1,692 m), and, the #4 shaft to 1,762 ft (537 m), were the main production shafts.



Little is known about the #1 and #3 shafts which were inactive at the time of the mine closing and are rarely referenced in the literature. Levels were established at 125-ft intervals to the 3000-ft level, and, 150 ft from 3000-5550 ft. Lovell (1979) indicates some 71,068 m of drifting, 21,539 m of crosscuts and 22,780 m of raises in the mine. All of the shafts are capped.

The property is located within the town of Kirkland Lake. It is surrounded by and includes a mix of residential and industrial lands. Highway 66, the main artery into Kirkland Lake travels across the southeastern part of the claim group, and, the Ontario Northland railway essentially bisects the property (railway runs easterly). Ontario Hydro have a substation on part of claim L.2100. Most of the land is cleared and no grid is developed. Topographic variation is minimal, in the order of 10 m.

The history of the property is summarized as:

1913-14: Sylvanite Gold Mines formed; trenching and two prospecting shafts (12 m and 15 m).
1916-17: Sylvanite Gold Mines: shaft to 120 ft (37 m), 169 ft (51.5 m) lateral development on the 100-ft level.
1922-27: Sylvanite Gold Mines; #2 shaft to 1,526 ft (465 m), #3 shaft to 118 ft (36 m), levels established to 1500-ft level; 2,744 m diamond drilling; 200 ton/day mill started May 1927.
1928-61: Sylvanite Gold Mines; 4 shafts, continuous production from 41 levels; 71,068 m drifts, 21,539 m crosscuts, 22,780 m raises; up to 600 tons/day processed.
1964: Sylvanite Gold Mines; interests sold, assets distributed, charter surrendered.
1977-83; Queenston Gold Mines; 2 surface drillholes (564.6 m).
1996-2001: Queenston – Franco-Nevada joint venture; no work done.
2002-06: Queenston Mining; no work done.

Past production from the Sylvanite mine is recorded as 1.68 million oz of gold from 4,580,786 t grading 11.4 g/t between 1927 and 1961 (RPA, 1996).

RPA (1996), reviewed the historic mineral resources on the Sylvanite property and recommended they not be included in the resource base since:

- 'the crown pillar resource of 24,766 t grading 11.3 g/t, sits immediately below a well developed surface infrastructure that would need to be dismantled, and;

- the South vein system workings containing approximately 907,000 t grading 3.4 g/t consists mostly of low-grade, salvage material from stope walls and mineralized inter-vein material that was not economic at (then) current gold prices.'

RPA (1996), indicated that there was some resource potential in the South vein system below 3,500 ft (1,067 m), and, in an exploratory surface (?) drillhole completed by Sylvanite south of the South vein system but neither were resources developed, nor, follow-up drilling undertaken on these two targets.

### **13.2 Property Geology and Mineralization:**

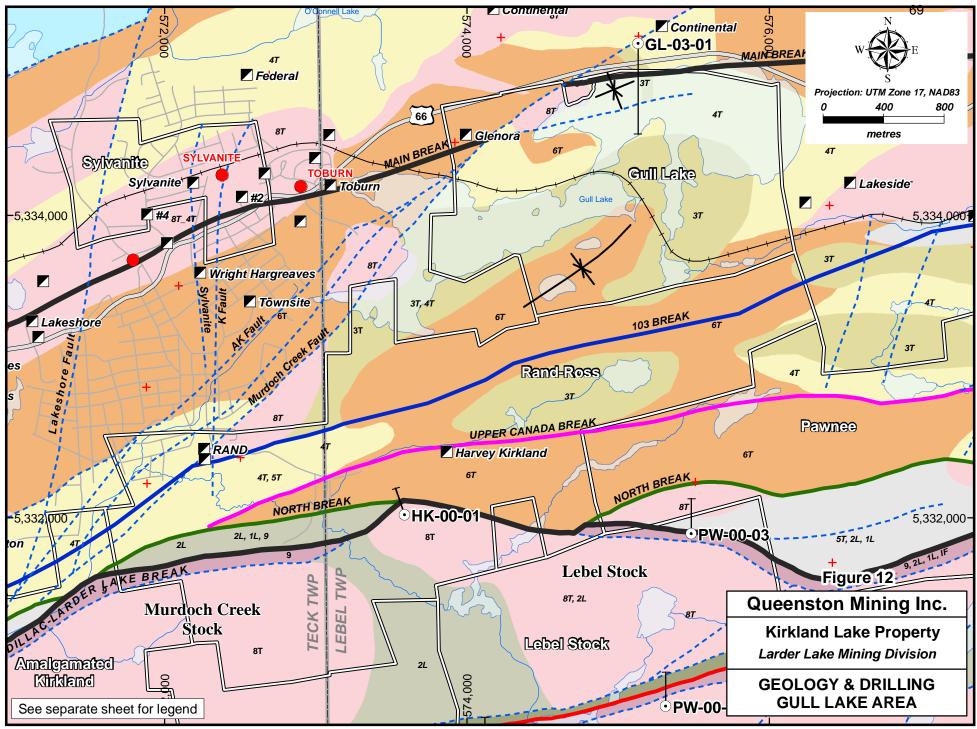
The Sylvanite property is underlain by Timiskaming assemblage sedimentary and volcaniclastic rocks sandwiched between syntectonic dykes of syenite to mafic syenite (Fig. 12). On surface, the sedimentary and tuffaceous rocks occur within a 300 m, east-northeast trending zone in the central part of the property, with primarily tuffaceous rocks in the northern 100 to 120 m of the sequence. Thomson (1948) indicates that the tuff section north of the sediments has been traced by drilling to the bottom of the workings – average dip of 60 degrees south. The syenite body to the south, hosts most of the near surface mineralization. It is some 500 to 600 m thick. The northern syenite intrusive is largely mafic syenite and is 325 to 425 m thick on surface (Fig. 12).

Structurally, the elements seen elsewhere in the camp are present on the Sylvanite lands. The strongest structure is the Kirkland Lake Main Break (Main Break). It lies close to the #2 shaft on surface and dips steeply south to the 3000-ft level where it joins with the #5 strike fault, dipping northwards thereafter (Thomson, 1948). Thompson (1948) notes that the break ranges in width from a thin mud seam with a few cm of alteration to a 4.6 m mylonite zone with several mud seams. Steeply dipping, subsidiary fractures which branch or are parallel to the Main Break are common in the South vein system (Thomson, 1948).

The Main Break and the South vein system are located within a syntectonic syenite body from surface to the 3000-ft level. Less is known about the South vein system below 3,000 ft (915 m) where the veins dip northerly approaching the #5 strike fault, given that drilling below the #5 fault did not encourage further exploration (Charlewood, 1964). The potential of the North vein system is not clear in the #5 strike fault area as well. Charlewood (1964) indicates that a downward continuation of the Main Break may exist, from the relationships noted on the adjacent Wright-Hargreaves and Lakeshore properties to the west. This south vein system (sic Main Break) below the 3500-ft elevation was recognized as a target area by RPA (1996).

The North vein system is located around the north contacts of the southern syenite body on surface, transgressing into the sediments and eventually the tuffaceous package with depth. It is the continuation of the North vein structure on the Wright Hargreaves property to the west (Thomson, 1948). As noted above, the North vein system is similarly not developed below the #5 strike fault. Charlewood (1964) indicates that variations in the North vein system have been traced to the 5400-ft level.

Two cross structures are also highlighted on the Sylvanite property – the Sylvanite Fault strikes north, dips 60 degrees west and has a right-handed, lateral displacement of some 43 m, and, the



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'K' Fault strikes north, dips 75 degrees west and exhibits a left-handed, lateral displacement in the order of 100 m. The location and specifics of a third cross fault, the Lakeshore Fault (further west) is unclear in the historic data on the Sylvanite property.

Mineralization occurs largely within quartz veins, vein breccias and breccia zones. Quartz is associated with the breaks and fracture systems. Thompson (1948) describes the zones as:

"The vein matter consists of quartz with associated altered and mineralized wall rock. The chief metallic constituent of the vein is pyrite. It is disseminated throughout the quartz and the wall rock. Most of the productive veins have one or more thin, smooth slips containing molybdenite. Other sulphides are scarce. Visible gold and tellurides are distributed along slips and fractures in the quartz and can usually be observed in stope or development faces that assay above average mine grade. Carbonate, sericite, chlorite and leucoxene have been developed along tiny fractures (in the syenite), thus giving the rock a bleached or buff coloured appearance.

In all veins, varying degrees of silicification show in the wall rock or rock fragments adjacent to the quartz."

### 13.3 Exploration, Drilling and Recommendations:

The last drilling on the Sylvanite property was undertaken by Queenston Gold Mines in 1987, encountering a best assay from a narrow vein of 5.5 g/t over 0.12 m (RPA, 1996).

Several targets are visualized from RPA's review in 1996. They are hampered by the depth of some targets, and, the surface infrastructure present for others.

Historic data (plans, sections et al) should be subjected to 3D computer modelling, from which considerations for future exploration should evolve.

### 14.0 RAND-ROSS PROPERTY

### 14.1 Description, Location and History:

The Rand-Ross property consists of 42 mining claims in the eastern part of Teck Township and the western part of Lebel Township (Fig. 11). Twenty-eight of the claims are patented for mining rights and surface rights, and, the remaining 14 claims are unpatented. The easternmost seven claims that form the Ross portion are subject to a 2.5% NSR royalty to the property vendor. All claims are subject to the Newmont royalty. Claim specifics et al are detailed in the Property and Claim List, attached as Appendix A.

The property is contiguous with the Amalgamated Kirkland property (west), the Gull Lake claims (north), the Pawnee property (east) and the Lebel Stock group (south). Historically, the property is divided into three parts: the past producing Rand portion (west) of 9 unpatented claims, the Harvey Kirkland property (central) with 21 patented and 5 unpatented claims, and, the Ross claims (east) composed of 7 patented claims.

A grid was last established on the Rand portion in 1991 by Battle Mountain Canada Inc. but it has seriously deteriorated. On the Harvey-Kirkland portion, north-trending (343 degrees) grid lines spaced 100 m apart, were cut in 1999 during the Queenston - Franco-Nevada joint venture. The grid covered the 12 easternmost claims on the Harvey-Kirkland portion. There is no grid on the Ross lands.

Three shafts are located on the property: the #1 and #2 shafts on the Rand claims, and, one shaft on the Harvey-Kirkland portion. On the Rand claims, the #1 or main shaft is 800 ft (244 m) deep, with an internal winze from the 800 level to 1,436 ft (438 m). The #2 shaft is 450 ft (137 m) deep with an internal winze from the 450 to the 550-ft level (data are incomplete). Levels are established at 100, 150, 300, 450, 550, 675 ft, and, at 125-ft intervals from 800 to 1425 ft (6 levels). There is also a crosscut from the Lakeshore mine onto the Rand property on the 6575-ft level (2005 m). An aggregate of some 5,663 m of underground development is noted on the Rand property in the literature, including the 902 ft (275 m) crosscut from the Lakeshore mine. The Harvey-Kirkland shaft is 420 ft (128 m) deep, with levels established at the 200-ft and 400-ft elevations. Some 27 m of lateral development are noted on the 200-ft level, 87 m on the 400-ft level. All of the shafts are capped.

The north part of the Rand property includes a residential area that forms the south part of the town of Kirkland Lake. Southeast from the residential area, a municipal road leads to the small subdivision of Harvey Kirkland at the Teck / Lebel township line. An ATV / skidoo trail extends easterly from the township line across the Harvey-Kirkland lands. A series of active and abandoned hydro lines provide further off-road access. A well maintained hydro line cuts across the central part of the Ross claims, and, the Ontario Northland railway is just north of the Ross claims in the northeast part of the claim group.

Portions of the Rand-Ross lands have been cleared for residential use, but most of the claims are characterized by low-lying to hummocky ridges of outcrop and slow moving creeks with alder swamps to marshy floodplains. Bedrock exposure averages 20 to 30% in the northern two thirds of the claim group but topographic variations overall are slight from 20 to 40 m. Vegetation includes immature spruce, fir and poplar with lesser amounts of jack pine, birch and willow on the

higher ground, and, open marshy to rhodendron and alder swamps in the low lying areas. The southern parts of the property are largely flooded from beaver activity.

The history of the Rand-Ross property is subdivided into the Rand, Harvey-Kirkland and Ross elements as:

History of the Rand claims:

**1918-22**: Ontario Kirkland Gold Mines; #1 shaft to 450 ft, #2 shaft to 450 ft; 5,395 ft (1,645 m) lateral development on 100, 150, 300, and 450-ft levels; 100 ton/day mill installed in 1921. **1922-24**: Montreal Ontario Mines; winze from 450 to 550-ft level (#2 shaft ?); 915 m lateral development on the 300, 450 and 550-ft levels, and, diamond drilling (amount unknown). **1924-26**: Kirkland Rand Ltd; shaft deepened to 800 ft (244 m), 924 m lateral development on the 550 and 800-ft levels.

**1927-29**: Kirkland Premier Mines; underground workings dewatered, 881 m of underground development.

**1936-38**: Kirkland Gold Rand Ltd; shaft dewatered and reconditioned, winze from the 800-ft level to 1,436 ft (438 m), levels at 1175, 1300 and 1425 ft; 591 m underground development; 3,554 m of underground diamond drilling.

**1946-47**: Hudson-Rand Gold Mines; mine dewatered to the 800-ft level, 433 m of development on the 675 and 800-ft levels; 1,702 m underground drilling in 51 holes.

**1951-52**: Consolidated Canorama Explorations; crosscut from Lakeshore Mine 6575-ft level (2005 m), driven 275 m into property.

**1974**: Kerr Addison Mines; 100 m surface diamond drilling in 4 holes.

**1978**: Newmont Exploration; geophysical surveys (magnetics, VLF-EM and IP); 7 drillholes (452 m).

**1991**: Battle Mountain Canada; airborne magnetic and VLF-EM survey; ground geological, magnetic and VLF-EM surveys; 9 drillholes (2,527 m).

1994: Cyprus Canada; 3 drillholes (1,309 m).

1994-2006: no new work undertaken.

The history of the Harvey-Kirkland part includes:

**1924-25**: Harvey Kirkland Mines; shaft to 420 ft (128 m), levels established at 200 and 400 ft; geological mapping, trenching, sampling; 3 drillholes (701 m).

**1929-30**: Harvey Kirkland Mines; 27 m underground development on the 200-ft level, 87 m development on the 400-ft level.

**1992**: Windjammer Resources; geological mapping, prospecting, magnetometer surveys; mechanical stripping and trenching.

1996-2001: Queenston – Franco-Nevada joint venture; magnetic and VLF-EM surveys,

geological mapping (1999); one drillhole (376 m) in 2000.

2002-06: Queenston Mining; no further exploration.

The history of the Ross claims is abbreviated due to their patented status. It is summarized as:

**1997**: Queenston – Franco-Nevada joint venture; claims acquired. **1997-2006**: no new work undertaken.

Past production is recorded at the Rand mine during 1922 amounting to 483 oz gold from 5,893 t at a recovered grade of 2.5 g/t (Lovell, 1979). No production is reported from the Harvey-Kirkland shaft, and, no resources are currently developed on the property.

### 14.2 Property Geology and Mineralization:

The Rand-Ross property straddles the Cadillac-Larder Lake Break. The southern third of the property is underlain by Tisdale assemblage ultramafic and mafic volcanics with narrow units of iron formation, while the northern two thirds hosts Timiskaming assemblage sediments, tuffs and alkalic flows to sills (Fig. 12). Both sequences are cut by syntectonic syenite intrusives.

Syenite intrusives are relatively limited in extent within the Timiskaming assemblage. The Tisdale assemblage, south of the Cadillac-Larder Lake Break, however, is variably amphibolitized and epidote altered due to the infringement of the Murdoch Creek syenite in the west part of the property and the Lebel Stock in the east part of the property, leaving only a 600 m window of Tisdale assemblage rocks between the two intrusives as a variably altered and metamorphosed contact aureole (Fig. 12). A relatively thin veneer (to 300 m) of altered Tisdale assemblage rocks also occurs north of the Murdoch Creek syenite on the Rand claims. Local sections of fuchsitic/paragonitic to sericitic carbonate rocks are well developed in that sector.

Structurally, the sequence contains the Cadillac-Larder Lake Break and the 103 Break noted further west. The 103 Break maintains its east-northeast strike in this area. It is equated with the historic North Harvey fault zone. The Cadillac-Larder Lake Break is more arcuate in shape, trending east-northeast to east-southeast across the property – skirting the north contacts of both the Murdoch Creek and Lebel Stock syenite bodies.

Accompanying the arcuate nature of the Cadillac-Larder Lake Break are two regional structures that become more prominent further east – the North Break and the Upper Canada Break. The North Break is interpreted as an intermittent splay feature immediately north of the Cadillac-Larder Lake Break. It is a more regional reflection of the anastomosing to branching nature of the faulting seen on a property scale. The North Break is analgous to the historic South Harvey fault. In this area, the North Break is interpreted to follow the Tisdale assemblage / Timiskaming assemblage contact, with carb rocks related to the Cadillac-Larder Lake Break located 200 to 300 m further south (Fig. 12). The precise relationship between the two structures is unclear, given that the Cadillac-Larder Lake Break normally follows the Tisdale / Timiskaming interface.

Like the North Break, the Upper Canada Break begins as a splay feature around the north contact of the Murdoch Creek Stock. It appears to start in the environment where the Murdoch Creek cross fault branches into a number of more northeast trending sheared and mylonitized zones on the Amalgamated Kirkland property. The Upper Canada Break angles east-northeasterly across the Rand property tracking roughly midway between the Cadillac-Larder Lake Break and the 103 Break further east. It is analgous to the historic Middle Harvey fault in the literature on the Rand deposit.

One, late, north trending, cross fault is noted on the property just east of the Rand #1 shaft (Thomson, 1948). It is tentatively joined with the 'K' cross fault some 1400 m further north on the Sylvanite property. Both locations have an indicated left-handed, lateral displacement along the fault.

Thomson (1948), discussed the geology of the Rand deposit as:

'Most of the gold-bearing zones found to date are in the syenite porphyry. The ore on the 450-foot level consists of fractured, red, feldspar porphyry with numerous quartz veinlets and much coarse grained chalcopyrite plus smaller quantities of pyrite, molybdenite and gold.

The strike of the veins in the porphyry and along inclusions of sediments is 87 degrees, dipping 75 degrees north to vertical. Veins in the sediments to the west strike 67 degrees and dip 55 degrees south.'

Thomson (1948) noted from in-house data that 'ore' had been opened up on the 675 and 800-ft levels averaging 8.91 g/t over 0.89 m, along 85.7 and 98.8 m respectively, but no production is recorded post 1922.

A crosscut south from the Lakeshore mine on the 6575-foot level into the Rand claims was completely in syenite but no assays are reported (Charlewood, 1964).

Little is known about the mineralization in the Harvey-Kirkland workings. The shaft was sunk in sheared Timiskaming conglomerate south of the Upper Canada Break. Assay results from underground have been reported in the Resident Geologist's files over various lengths and widths as 4.8 g/t over 0.88 m, and, 8.2 g/t over 1.46 m, but, the results are not validated from the surface mapping, or, a cursory examination of the muck pile.

## 14.3 Exploration, Drilling and Recommendations:

No exploration has been undertaken on the property since 2000. The last work completed was during the Queenston – Franco-Nevada joint venture, with linecutting, magnetic and VLF-EM surveys in 1999, followed up by one drillhole (HK-00-01) on the Harvey-Kirkland portion in 2000.

The target chosen in the drilling was the Cadillac-Larder Lake Break, the main arm of which was represented by a strongly deformed corridor from 114.6-144.3 m. The break spanned the Tisdale / Timiskaming assemblage contact. It was characterized by ankeritic, faulted tuffs and volcaniclastics of the Timiskaming assemblage, and, faulted, ankeritic ultramatics along with green and yellow carbonate rocks and breccias of the Tisdale assemblage. No significant gold values were encountered in the drillhole.

For the location of drillhole HK-00-01, refer to Fig. 12 .

Current and past exploration results tend to give the Rand-Ross property a lower priority in the overall package of claims. Drillhole HK-00-01, however, is the first drillhole of record on the Cadillac-Larder Lake Break across its 2-km strike length on the Harvey-Kirkland lands. Also, data on the Harvey Kirkland shaft are incomplete.

A series of drillholes on the Cadillac-Larder Lake Break (2 holes), and, the Upper Canada Break environment around the Harvey Kirkland shaft (2 holes), would greatly assist in moving the database forward. A couple of drillholes targeting the 'ore' system highlighted by Thomson (1948), between the 675 and 800-ft levels on the Rand property would similarly advance the knowledge on the Rand mineralization. The evolving database from those results could then be used to more specifically target structures and mineralization in future programs.

### **15.0 GULL LAKE PROPERTY**

### 15.1 Description, Location and History:

The Gull Lake property consists of 22 claims in the central part of western Lebel Township (Fig. 11). Twenty-one of the claims are unpatented, 19 of which have underlying agreements with a 10% NPI. The two remaining unpatented claims were staked by Queenston in 2000 and 2001. The remaining claim (L – 531754 lease number 106966) is leased for both mining and surface

rights. It similarly has a 10% NPI attached. The lease is due to expire on June 1, 2012 but is renewable. The leased claim contains the Glenora shaft. The entire property is subject to the Newmont royalty. Claim specifics are detailed in Appendix A.

The north half of the property was covered by north-trending grid lines spaced 100 m apart in the winter of 2001. Most of the grid lines were on Gull Lake such that only the land portions have any semblance of the grid remaining.

The Glenora shaft is located in the northwest corner of the property on leased claim L-531754. The shaft extends to 465 ft (142 m), with 786 m of lateral development on the 150, 300 and 450-ft levels. The shaft is capped.

The claim group covers the eastern three quarters of Gull Lake. It is contiguous with the Ross portion of the Rand-Ross property to the south. Highway 66, which follows part of the north shore of Gull Lake, crosses the northwest corner of the claim group near the Glenora shaft. The property is also roughly bisected by the Ontario Northland Railway from Kirkland Lake to Rouyn, Quebec, which runs easterly across the property. The claims are reasonably accessible via Highway 66 from the north end of the property, and, by a series of logging roads and trails along the east side of Gull Lake. Special consideration needs to be given to working on Gull Lake since it is the primary water supply for the Town of Kirkland Lake.

The land portions of the Gull Lake property are characterized by 30 to 40% outcrop exposure with a scrubby mixed bush of jack pine, spruce, fir, poplar and birch. Shorelines range from steep and rocky to flat and swampy with alders and bulrushes. Topographic relief is in the order of 40 m.

The history of the Gull Lake property is summarized as:

1912: Glenora claim staked by T.H. Tough.

**1921-23**: Queen Lebel Gold Mining; 321-ft (98 m) shaft east of property on a 60 to 120 cm mineralized quartz vein; 183 m lateral development on the 200 and 300-ft levels; underground drilling.

1924: London Gull Lake Mines; 45 ft inclined shaft.

1933: Glenora Gold mines; 4 drillholes, 600 m surface trenching.

**1936-37**: Glenora Gold Mines; 610 m trenching on number 3 vein, 212 m diamond drilling; shaft to 465 ft (142 m), 786 m lateral development on 150, 300 and 450-ft levels; 2,416 m underground drilling; 318 t of 'ore' hoisted.

**1934-54**: Lakeside Kirkland Gold Mines (south part of claim group); second shaft east of property (as Queen Lebel 1921-23), 600 m lateral development; two drillholes (182 m) on current property. **1938**: Gull Kirkland Mines; 1,968 m surface drilling.

**1945**: Glenora Gold Mines; four drillholes (1,454 m) into Murdoch Creek Fault.

1963: claims lapse

1972-73: Deloye / Allard; surface trenching.

**1981-82**: Jokabo Resources; geophysical surveys, trenching in southeast part of property. **1982**: North Kirkland Mines; Glenora shaft dewatered; underground mapping and sampling; 26 surface drillholes.

1984-85: Leahy / Kiernicki; VLF survey, option to HSK Minerals.

**1986-88**: HSK Minerals / Queenston Mining; stripping and trenching (1986); 1 drillhole (434 m). **1989-93**: Battle Mountain Canada; airborne magnetics and VLF; ground magnetics and mapping. **1996-2001**: Queenston / Franco-Nevada joint venture; magnetic and VLF surveys (2001). **2002-03**: Queenston Mining; one surface drillhole (902 m).

Neither production nor resources are recorded in the area of the Glenora shaft. Some 318 t of 'ore' were hoisted by Glenora Gold Mines in 1936-37, but no specifics are available on either the tenor or the disposition of the material.

# 15.2 Property Geology and Mineralization:

The Gull Lake property is underlain by Timiskaming assemblage rocks and associated syntectonic syenite and mafic syenite intrusives (Fig. 12). The property sits 1-2 km north of the Cadillac-Larder Lake Break. The assemblage includes sedimentary to volcaniclastic rocks as well as trachytic tuffs in roughly equal proportions. A southwest-plunging synform is evident in the south central part of the claim group.

The Glenora shaft, in the far northwest sector of the property, was sunk on a quartz-carbonate vein system believed to be the extension of the Toburn South vein / Kirkland Lake Main Break (Fig. 12). The vein system ends along a northeast trending arm of the Murdoch Creek Fault with a suggested left-hand throw of 200 m. The Murdoch Creek Fault is interpreted to have both pre-ore and post-ore movement in this area (Thomson, 1948).

Several parallel shears in the south part of the property are accompanied by extensive alteration but are without known veining or mineralization. Quartz veins in the southeast corner of the property, adjacent to the Lakeside Kirkland / Queen Lebel workings, are barren on the Gull Lake ground. The shearing is not related to the 103 Break, which is interpreted to be south of the Gull Lake claims (Fig. 12).

The Glenora vein system roughly follows a tuff / conglomerate contact striking at 70 degrees and dipping steeply south towards the northwest-dipping, Murdoch Creek Fault. On the adjacent Toburn property (west), the South vein (part of the Kirkland Lake Main Break), was the strongest and most persistent structure although production along it was limited (Thomson, 1948). The Toburn vein system splits into three narrow veins approaching the Glenora shaft area.

Data on the vein system at the Glenora shaft are incomplete with indications of surface values from 8.88 g/t gold over 0.46 m along a length of 80.8 m, to 18.93 g/t over a length of 32.0 m (width uncertain). On the 150-ft level, mineralization averaging 6.86 g/t across 1.07 m is reported over a drift length of 13.7 m. RPA (1996) indicate that drifting on the 300-ft level onto the adjacent Toburn property (west) encountered no continuous gold mineralization, and, drifting on the 450-ft level was advanced 91.5 m north onto a parallel vein but with only low gold values to 3.09 g/t over 0.76 m.

Information on the number 3, or Giroux, vein is similarly limited, however; a trenching program in 1935 indicated a 25.9 m length of the vein averaged 22.01 g/t (17.76 g/t cut) at an average width of 0.30 m. This vein is east of the Glenora workings and has a more northeasterly strike. Its relationship with the Glenora system and the northeast-striking Murdoch Creek Fault is unclear. In 1945, an exploration effort was directed toward the Murdoch Creek Fault where weak mineralization had been encountered underground (RPA, 1996). Four drillholes (1,454 m) were completed but no significant gold values were found.

## 15.3 Exploration, Drilling and Recommendations:

Subsequent to the magnetic and VLF-EM surveys conducted during the Queenston – Franco-Nevada joint venture in 2001, one hole was drilled on the Gull Lake property in 2003. The drillhole (GL-03-01) was 902 m in length. Core size was NQ. The drilling was contracted to Heath and Sherwood (1986) Inc. of Kirkland Lake between April 20 and May 5, 2003.

For drillhole location, refer to Fig. 12.

Drilling from the south was precluded by lake conditions and very steep topography on the target section, such that the hole was spotted, with consent, on claims held by Kirkland Lake Gold Inc. The drillhole was collared at – 50 degrees and passed onto Queenston lands at 213 m downhole. The core was logged by Queenston personnel using a simple k-edit format. Preliminary logs were subsequently loaded into the logii system – the geological software used.

The main target of the Gull Lake drillhole was the extension of the Kirkland Lake Main Break east of the Murdoch Creek Fault. Between 498.9 and 537.7 m, a series of faulted and crushed zones with accessory ankerite and sericite alteration were encountered in Timiskaming wackes and argillites. While the faulting and alteration have a signature similar to the Kirkland Lake Main Break, veining and mineralization were generally weak, and, no significant gold values were encountered. Given that the target and the stratigraphy dip south, the drillhole was continued to its budgeted depth of 902 m providing a more complete section of the rock sequence.

The Glenora shaft is located at the far eastern end of the Kirkland Lake Main Break style of mineralization. The western plunge of the Main Break mineralization suggests there is limited depth potential in this environment although only minor deep exploration has been attempted (shaft depth to 142 m). The geometry of the breaks and the land position, however, preclude much potential in the area. The eastward extension of the Kirkland Lake Main Break under Gull Lake remains a legitimate target but a program of check mapping and compilation is required prior to recommending further drilling.

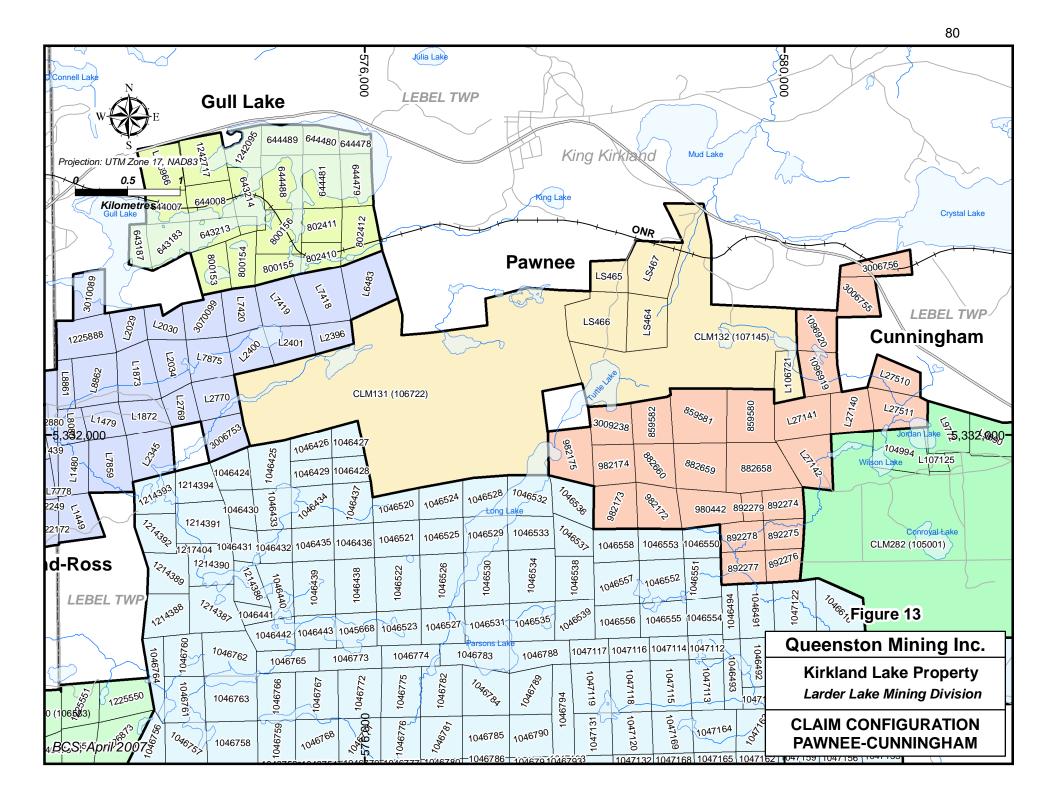
## **16.0 PAWNEE PROPERTY**

## 16.1 Description, Location and History:

The Pawnee property is composed of 42 claims in west central Lebel Township (Fig. 13). Four claims are patented for mining rights and surface rights. The remaining 38 claims are leased: CLM 131 with 27 claims and claim L. 94199 are leased for mining rights and surface rights, while CLM 132, comprised of 10 claims is leased for mining rights only. The 21-year leases are renewable. The property is subject to the Newmont royalty. Claim specifics are attached as Appendix A.

The property is contiguous with the Rand-Ross property (west), the Gull Lake property (north), the Cunningham property (east), and the Lebel Stock property (south). The Pawnee property was part of a larger 'Pawnee' project during the Queenston – Franco-Nevada joint venture that extended primarily south into the Lebel Stock claims. The southern and western third of the property was covered by north trending (003 degrees) grid lines spaced 100 m apart in 1998. The grid was an expansion southward of a prior grid established by Noranda Exploration / Central Crude Mines in 1990 across the northern two thirds of the property. Grid lines to those earlier time frames have deteriorated but are still visible.

The Pawnee shaft is located on the patented claims in the north part of the property. It is 780 ft (238 m) deep with levels established at 125-ft intervals and 2,065 m of unspecified lateral development. The shaft is capped.



The south part of the Pawnee property is accessible via the ATV / skidoo trail that extends eastward across the Rand-Ross property. The trail turns northward near the north end of Long Lake, leading to the Pawnee shaft area and thence northwest via a private bush road to the village of King Kirkland. King Kirkland lies north of the property on Highway 66, some 5 km east of Kirkland Lake. Highway 66 just clips the far northern part of the claim group, and, the Ontario Northland railway, which runs east from King Kirkland, tracks about 450 m south of the highway in the north part of the property.

The north part of the property is also cut by an active hydro line striking at 93 degrees. The line extends eastward from the Teck / Lebel township line across the Ross portion of the Rand-Ross property and through the Pawnee claims to the east part of Lebel Township. It is some 150 to 200 m south of the Pawnee shaft and has well developed maintenance trails that provide access to the east part of the claim group. The uniform trend of the hydro line in the Pawnee area was used to establish the 20+00 N base line in the Noranda / Central Crude (1990) and Queenston (1994) eras.

The Pawnee property is characterized by a hummocky terrain with low-lying outcrops in ridges, separated by alder and spruce swamps. Outcrop exposure averages 10-20%, and is best developed in the northern and eastern parts of the area. Vegetation is immature and mixed, consisting of spruce, fir, larch and poplar as the norm, with birch and jack pine locally on some of the higher ground, and, alder, spruce and larch swamps in the lower areas. Relief is in the order of 50 m, with generally higher ground to the east.

The history of the Pawnee property is summarized as:

**1961-63**: Upper Canada Mines; acquire property; 10 surface drillholes (1,732 m), west of shaft. **1964-65**: Labrador Mining (option); Induced Polarization survey; 36 surface drillholes (6,050 m). **1966-67**: Labrador Mining; rehabilitate shaft, 915 m lateral development on 500-ft level, 229 m on 750-ft level; underground drilling on 250, 500 and 750-ft levels.

1994: Queenston Mining; magnetic survey, 10 surface drillholes (2,949 m).

**¹⁹²²⁻²³**: Pawnee Kirkland Gold Mines incorporated; some surface work on 4 patented claims. **1927-28**: Pawnee Kirkland Gold Mines; shaft to 780 ft (238 m), levels at 125-ft intervals, 983 m of lateral development; 4 surface drillholes by Lucky Tiger Combination Gold Mining. **1936**: Regal Kirkland Gold Mines; dewater shaft; 168 m of lateral development; 313 m of

**¹⁹³⁶**: Regal Kirkland Gold Mines; dewater shaft; 168 m of lateral development; 313 m of underground drilling.

**¹⁹⁴⁴⁻⁴⁵**: Belrosa Mines; mapping and trenching; 23 surface drillholes by Macassa-Sylvanite Mines in south part of property.

**¹⁹⁴⁴⁻⁴⁵**: Rocamsa Mines; 3 drillholes (420 m) – holes 5, 6 and 7 on Upper Canada Break, east part of property (see also Cunningham property).

**¹⁹⁸²**: Laberada Mining; mapping and geophysical surveys; 9 surface drillholes (1,597 m) in south part of property.

**¹⁹⁹⁰**: Noranda Exploration / Central Crude Mines (option); magnetic survey; 15 surface drillholes (3,633 m).

**1996-2001**: Queenston – Franco-Nevada joint venture; geophysical surveys (magnetics and VLF-EM); geological mapping; 3 drillholes (1,398 m) of Pawnee project on Lebel Stock lands. **2002-06**: Queenston Mining; Induced Polarization survey and soil geochemical survey (2005).

There is no record of production from the Pawnee property, and, no resources are currently developed.

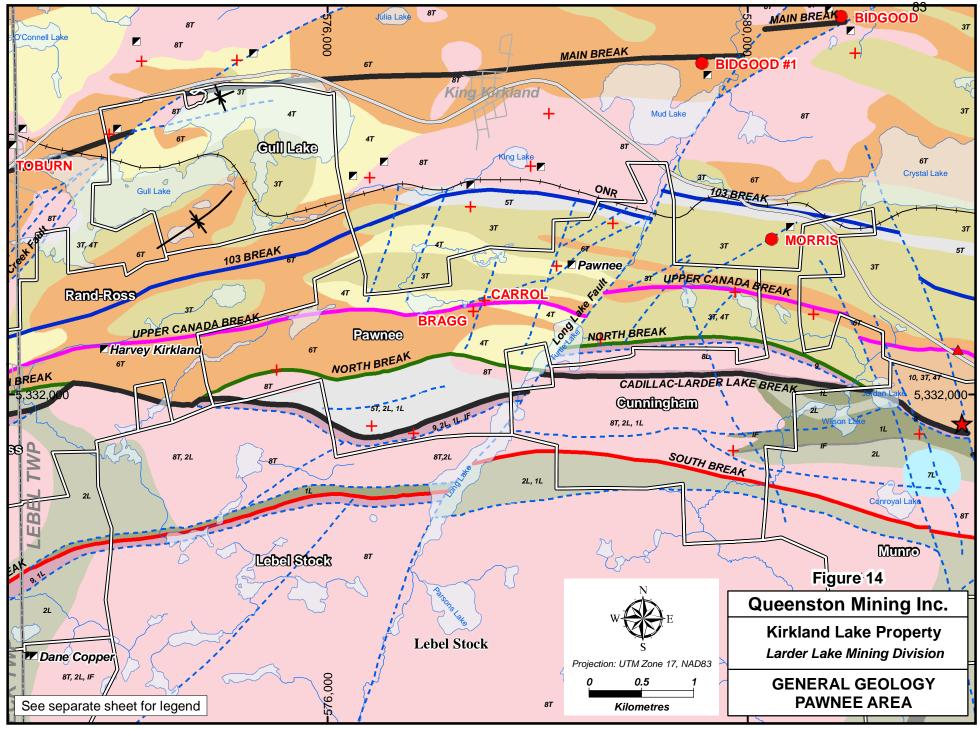
# 16.2 Property Geology and Mineralization:

The southern margin of the Pawnee property is essentially along the Cadillac-Larder Lake Break and North Break structures (Fig. 14). The Cadillac-Larder Lake Break continues to skirt the north contact of the regional Lebel Stock syenite in the west part of the property, transgressing into the Lebel Stock east of a north-northeast to northeast trending cross fault – the Long Lake fault. The cross fault follows a chain of lakes and creeks separating the eastern third of the property from the west. It plots some 450 to 550 m east of the Pawnee shaft and is interpreted to have a left-handed lateral offset approaching 350 m (Fig. 14).

In the western two thirds of the property, the Cadillac-Larder Lake Break cues along a thin veneer of Tisdale assemblage mafic and ultramafic volcanics with narrow units of chert and iron formation at the north contact of the Lebel Stock. The Tisdale assemblage varies from a few meters to 100 m thick. It is characterized by strong carbonate alteration and shearing, amphibolitization and local epidote alteration. Strong shearing and carbonate alteration are also noted in the north contact of the Lebel Stock.

The North Break structure splays off the Cadillac-Larder Lake Break near the west boundary of the property. It defines a lozenge up to 500 m thick of variably altered sedimentary and tuffaceous rocks of probable Timiskaming assemblage (Fig. 14). Carbonate alteration, shearing and syntectonic dykes of syenite are common within the lozenge. The alteration and shearing patterns are locally branching to anastomosing in nature between these two structures, both of which dip steeply south.

North of the North Break, on the western two thirds of the property, is a 500 to 700 m thick package of Timiskaming assemblage sedimentary rocks with local tuff units, followed by a 1-km thick system dominated by trachyte flows that host the Pawnee deposit. The sequence of trachyte flows varies from massive to pseudoleucite-spotted and amygdaloidal, with potential trachyte sills, dykes of syenite, and, narrow intercalated horizons of tuff and sediment. Its north contact with another Timiskaming assemblage sedimentary package is near the northern fringes of the property (unit of 5T on Fig. 14).



BCS, October 2007

East of the Long Lake cross fault, the Lebel Stock contact is essentially along the south boundary of the property. In this area, the shearing and variable carbonate alteration at the contact are associated with the North Break. Here, the Cadillac-Larder Lake Break is some 200 to 300 m further south within the Lebel Stock. North of the Lebel Stock, in the eastern third of the property, is a thick sequence of trachyte flows, tuffs and breccias with local sedimentary sections. This sector appears to be the lateral equivalent of the Pawnee package although tuffaceous rocks are more common. The Tisdale assemblage, altered lozenge and the sedimentary package south of the Pawnee sequence west of the Long Lake cross fault, are absent here.

Scattered syntectonic dykes of syenite are found in both the Tisdale and Timiskaming assemblages.

In addition to the Cadillac-Larder Lake Break and the North Break structures used to frame the general geology, the Upper Canada Break and the 103 Break are also present on the Pawnee lands. The Upper Canada Break strikes east-northeasterly (dips south) across the property. It tracks about 400 m south of the Pawnee shaft and is displaced some 300 m northward along the Long Lake cross fault. East of the cross fault, the Upper Canada Break roughly follows the 20+00 N base line. The 103 Break is largely off the property. It strikes onto the far northern part of the claim group around the Ontario Northland railway and is represented by a strongly sheared and carbonated corridor within a unit of Timiskaming wacke (Fig. 14).

Strong shearing and carbonate alteration are common associations with the regional structures, including splay and branching elements. Carbonate alteration and oxidation are also common within the sphere of influence of cross structures. In addition to the prominent Long Lake cross fault, several cross structures are noted on the property, both through recent and historical mapping as well as the geophysical surveys. These features have received minimal attention in the past such that their significance in today's context is unclear. Although orientations vary from north-northwest to north-northeast, most cross structures (including the Long Lake cross fault) indicate a left-handed, lateral displacement.

The Pawnee shaft is located within the package of trachyte flows and sills, with dykes of syenite and intercalated horizons of tuff and sediment. Structurally, the deposit sits footwall to the Upper Canada Break and west (interpreted hanging wall) of the Long Lake cross fault with a complicated array of structures subparallel to both of the regional features, as well as branching to splay elements. Mineralization in the Pawnee system was thoroughly described by RPA in 1996 as:

'The main mineralization previously investigated on the property in some detail is located in the vicinity of the Pawnee shaft, where three, east-striking veins and the 060-degree striking Pawnee zone / Laberada vein system have been identified.

Vein #1 is located 45 m north of the shaft along a conglomerate-trachyte contact. It has been traced for a strike length of 14 m by underground drifting. Sampling results are unknown. The vein was tested to the west by several underground holes which intersected alteration with low gold values.

Vein #2, the shaft vein, was developed on the 125, 250, 500 and 750-ft levels in 1928. On the 750 level, the vein was drifted on for at least 150 m and returned significant assays ranging from 7.61 g/t gold over 0.51 m, along 10.7 m, to, 14.64 g/t over 0.99 m along 32.0 m. The mineralized zone consists of pyrite and traces of chalcopyrite, molybdenite, tellurides and native gold in a 30 to 60 cm cherty quartz core, surrounded by zones of silicification with narrow lenses of brecciation and potassic alteration. The host is a grey trachyte flow. Underground drill intersections ranged from 3.43 g/t to 5.83 g/t gold over widths of 2.1 to 4.3 m.

Vein #3 was located on the 750 level at the south end of the 82E crosscut, some 410 m south and 610 m west of the shaft. A grab sample from the mineralized alteration zone assayed 14.74 g/t. Five holes testing this zone returned assays of 1.37 g/t over 3.7 m in hole D-778, to 6.17 g/t over 1.5 m in hole U-777.

The Carrol zone is a small outcrop of intensely sheared, sericitized and carbonatized conglomerate sitting on the Upper Canada Break structure, some 60 m south of the #3 vein.

The Pawnee zone was developed on the 750-ft level for a distance of 400 m, and, it was the focus of surface and underground exploration work by Labrador Exploration in 1965. The zone consists of a pyritic shear zone in altered trachyte with discontinuous, narrow lenses of quartz and varying widths of silic alteration and brecciation. Assays from this zone range from 1.37 g/t over appreciable widths to 343 g/t over narrow widths, but no ore shoots were found. Drillhole D0737 intersected zones of quartz breccia and sericite schist with 2-4% pyrite, which averaged 5.49 g/t over 18.3 m.

The Bragg zone is located 150 m west of the 82E crosscut at or near the intersection of the Pawnee zone and the Upper Canada Break. Gold mineralization is associated with an eaststriking band of sericitic, silicified, and pyritic conglomerates and trachyte tuffs in the footwall of the Upper Canada Break. The footwall has been tested along a strike length of 215 m and a vertical depth of 215 m. It has a maximum width of about 30 m and a length of about 137 m, narrowing abruptly at both ends. Previous drill intersections include hole 62-3, which intersected 6.51 g/t over 1.7 m and 2.06 g/t over 2.3 m; hole 62-5, which intersected 1.37 g/t over 35.2 m, including 8.91 g/t over 0.8 m, and; hole 90-12 which returned assays of 0.51 g/t over 33.4 m, including 1.27 g/t over 10 m.'

RPA (1996) adds, that despite the significant gold mineralization present, no resource estimates are reported.

The variably sheared and altered Cadillac-Larder Lake Break / North Break lozenge environment was also a target of exploration by Belrosa Mines in 1944-45 (23 drillholes) and Laberada Mining in 1982 (5 drillholes – 82-5 to 9 incl. in two fences). Erratic anomalous gold values were found in

the system but economic mineralization was not encountered. A best assay of 1.37 g/t gold over 0.9 m in hole 17 (drillhole lost) of the Belrosa program, was not duplicated in a follow-up hole (17A) from the same collar. The host was mineralized syenite. The best assay interval in the Laberada program was also associated with mineralized syenite along with carbonate alteration and veining at the Tisdale assemblage / Timiskaming assemblage contact. Hole 82-6 intersected 0.59 g/t gold over 3.0 m in mineralized syenite, followed by 2.0 m at 23 ppb gold, and, 1.40 g/t over 0.8 m (cherty veining in syenite). No other values greater than 0.4 g/t gold were encountered in the Laberada drilling.

#### 16.3 Exploration, Drilling and Recommendations:

The exploration effort on the Pawnee property during the Queenston – Franco-Nevada joint venture was directed towards the Cadillac-Larder Lake Break and North Break structures in the western two thirds of the property. Anomalous gold values had been encountered in previous work by Belrosa Mines in 1944-45 and Laberada Mining in 1982, and, in addition to bringing the database up to date, the regional structures were a priority target. No work was attempted on the more advanced database at the Pawnee shaft. Ground magnetic, VLF-EM and geological surveys were completed in 1998 and 1999. Three drillholes followed, but all three holes are on the Lebel Stock property (next).

In early 2005, the east part of the joint-venture grid was 'freshened' and expanded northward to 20+00 N by Robert Craig of Rouyn, Quebec. A frequency-domain, induced polarization survey was subsequently contracted to Belanger Geophysics of Rouyn, Quebec in March 2005. The IP survey used a dipole-dipole array with an 'a' spacing of 50 m and n = 1-6 over the new grid (18 lines / 46.8 km). Five lines were selected for follow up with an 'a' spacing of 25 m (10.3 km). The total survey was 57.1 km and covered parts of both the Pawnee and Lebel Stock properties. The Pawnee shaft environment was north of the survey area. Pseudosections included plots for resistivity, phase and metal factor. In all, some 19 distinct anomalous zones were indicated by the survey.

Three, main anomalies are highlighted. They have strong phase values with rather well defined pant-leg patterns and weak resistivity decreases. Two anomalies are hanging wall (south) of the Cadillac-Larder Lake Break within the Lebel Stock. Both of these anomalies are at shallow angles (45 degrees) to the regional structure, and, one feature appears to transgress the Cadillac-Larder Lake Break. This environment has a series of outcrop ridges and local traces of magnetite in the syenite host, such that the potential of these two anomalies is unclear. The third feature is within

the North Break / Cadillac-Larder Lake Break lozenge, hanging wall to a 150 m thick dyke of syenite. It is a potential drill target.

Within the survey, the Upper Canada Break and the Long Lake cross fault systems are characterized by well defined, low resistivity and low phase corridors without any anomalous parts. The South Break structure, which occurs further south on the Lebel Stock property, is more poorly defined. It appears to be represented by a resistivity low zone with local anomalous phase readings in both the hanging wall and footwall.

In order to priorize the anomalies, a soil geochemistry survey was undertaken by Queenston personnel in May 2005. The two IP features hanging wall to the Cadillac-Larder Lake Break were not indicated to be anomalous in gold from the soil geochemistry, but the feature in the North Break lozenge was enhanced by the results.

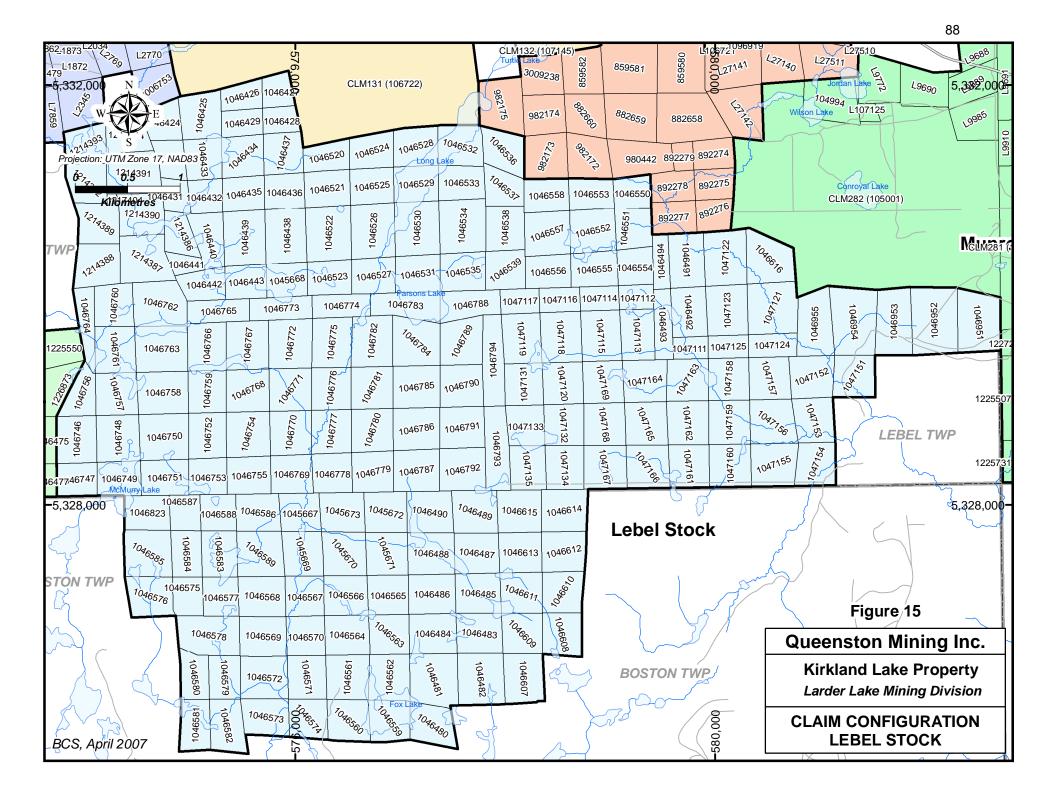
An in-house memo (Benham, 2006) recommended six drillholes from 300 to 700 m in length (3,000 m total) to follow up the IP and soil geochemical results. The recommendations target weak to moderate IP responses with or without geochemical anomalies associated with the regional structures, and, are integrated with the historic work by Belrosa and Laberada Mining. One drillhole is on the Lebel Stock property. This program would greatly assist in designing future programs should the survey parameters of IP and geochem better discriminate target selection.

In addition to the in-house recommendations, the Pawnee deposit appears to be a likely candidate for 3D computer modelling. The deposit sits footwall to the Upper Canada Break and hanging wall to the Long Lake cross fault with a complicated array of structures subparallel to both regional features as well as branching to splay elements. Modelling would assist in correlating corridors of mineralization along with their potential controls and offsets, given that no resources have currently been developed from the significant mineralization present.

# **17.0 LEBEL STOCK PROPERTY**

### 17.1 Description, location and History:

The Lebel Stock property consists of 216 unpatented mining claims in the southern part of Lebel Township and the northern part of Boston Township (Fig. 15). The claims are 100% owned by Queenston Mining. Ten claims in the northwest corner of the property (the former Hydroline Group) are subject to a 1.5% NSR royalty. All of the claims are subject to the Newmont royalty.



The claims are due to expire in June 2010, but there are sufficient assessment credits to hold the property for a much longer period. Claim specifics are detailed in Appendix A.

The property is contiguous with the Teck A & B property (west), the Pawnee property (north), the Cunningham property (northeast), and, the Munro group (east). Since the formation of the Queenston – Franco-Nevada joint venture in 1996, the Lebel Stock property has been worked as two separate projects – the Pawnee project to the west, and, the Munro project (east). The division between the two project areas was roughly along the Long Lake cross fault and its associated chain of lakes and creeks, partly due to limited access across that area, and, partly a reflection of past exploration work.

On the Pawnee project portion, north-trending (003 degrees) grid lines, spaced 100 m apart were established over the northern part of the Lebel Stock property in 1998. The grid extends south of the Pawnee property for a depth of roughly six claims. On the Munro project side, grid lines trend true north and are spaced 400 ft apart. They extend for a depth of approximately one claim unit into the Lebel Stock lands. The grid was a re-establishment and expansion of a historic grid on the Munro group (east and north), with several generations of linecutting between 1996 and 2001.

The Pawnee project side is accessible from the ATV / skidoo trail that tracks across the south part of the Pawnee and Rand-Ross claims. The Munro project portion is accessible via a well maintained road along the Lebel / Gauthier township line from Highway 66 to the Kirkland Lake landfill. Historic drill roads and trails on the Munro group extend from the township line road westward and south to the Lebel Stock part of the grid. The central and southern parts of the Lebel Stock property are difficult to access.

The terrain on the Lebel Stock property is quite variable from open bogs, spruce, rhododendron and alder swamps with flooded areas, to outcrop knobs and scarps, to relatively flat sand plains of the Munro esker (in the far eastern part of the property). Vegetation is dominated by spruce, fir and poplar with variations of jack pine and birch in the slightly higher ground, alders, spruce and peat bogs in the lower areas, and, clean jack pine forest in the sand plain. Relief is generally 20 to 40 m, but is in excess of 90 m overall from the low lying swamps and waterways (310 to 320 m above sea level), to the highest outcrop area in the northeast part of the Boston Township claims (400 m above sea level).

The history of the Lebel Stock property dates to the early days of the camp but records of that work have not survived. Most of the past work has focused on the north contact of the Lebel Stock syenite in conjunction with work on the Pawnee property. It is summarized as:

**1944-45**: Belrosa Mines: linecutting, stripping, trenching as westward extension of work on Pawnee property.

1946-50: Darmac Gold Mines; 4 x-ray drillholes (183 m); 8 AXT drillholes in southeast corner Lebel Township. One x-ray hole and 3 AXT holes (1, 2 and 3) on Lebel Stock property.
1959-60: Jones and Laughlin Steel Corp; 18 claims in Boston Twp; mapping, 1 drillhole (195 m).
1976: Canico; geological and magnetic surveys (6 claims, northwest corner).
1978-79: Canico; magnetic and geological surveys; 13 claims in northeast part Munro portion, part of former Darmac lands.
1988-89: HSK Minerals; airborne magnetics and VLF-EM over entire property.
1989-92: Battle Mountain Canada; airborne magnetics and VLF-EM; ground magnetic and geological surveys, prospecting (work on 16 claims, northwest corner).
1996-2001: Queenston - Franco-Nevada joint venture; magnetic and VLF-EM surveys; 3 drillholes (1,398 m) – drilling on Pawnee project portion.
2002-06: Queenston Mining; IP and soil geochemical surveys on Pawnee portion.

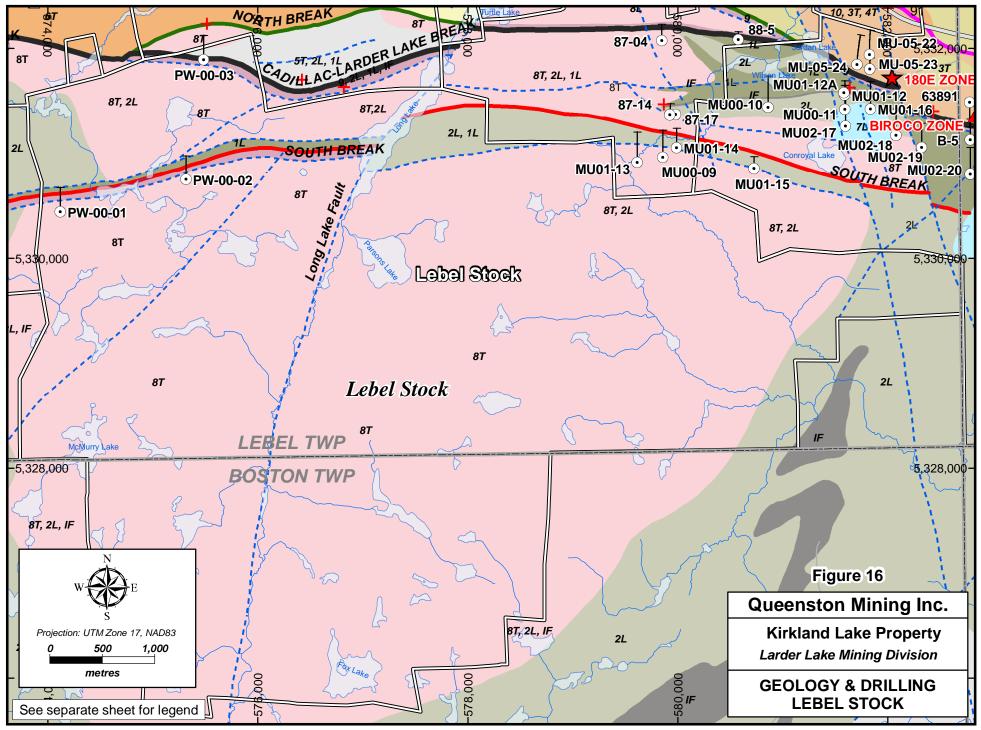
There is no past production on the Lebel Stock property, and, no historic or current resources are presently developed.

# 17.2 Property Geology and Mineralization:

The Lebel Stock property essentially covers the Lebel Stock syenite complex, a 6.5 by 7 km subovoid intrusive body with large dykes to irregular apophyses of syenite locally extending outwards into the adjacent country rock. The complex tends to have contaminated margins with sections of mafic syenite and xenoliths to inclusions of country rock, in addition to a variably developed contact aureole where the host rocks are more highly altered and metamorphosed. Contact effects are best developed in the western and southern margins of the complex, and, are marked by elevated magnetics within and around the intrusive's contacts (Fig. 16).

Contact effects are much more poorly defined along the northern margin where the syenite is cut by a series of regional structures, including the Cadillac-Larder Lake Break, the North Break and the South Break. On the Lebel Stock property, the Cadillac-Larder Lake Break skirts the north contact of the intrusive system on the Pawnee project side. It transgresses into the syenite complex east of the Long Lake cross fault, which has a perceived left-handed, lateral offset of the breaks and the syenite complex in the order of 300-350 m. Both the Cadillac-Larder Lake Break and the Long Lake cross fault are characterized by strong magnetic 'lows' – a function of the destruction of magnetite by faulting.

The regional nature of the Long Lake cross fault is confirmed from one drillhole by Jones and Laughlin Steel Corp., much further south in Boston Township. The drillhole is completely within the syenite stock on current Queenston lands.



BCS, November 2007

East of the Long Lake cross fault, the North Break and the Cadillac-Larder Lake Break are north of the property on the Cunningham claims (next).

The South Break is also characterized by a pronounced zone of low magnetics. It is some 600 to 1,100 m south of the Cadillac-Larder Lake Break and is crudely subparallel to that regional feature. The South Break is largely on the Cunningham claims east of the Long Lake cross fault, but a more westerly trending splay element does exist on the Lebel Stock lands in that area (Fig. 16).

Tisdale assemblage volcanics are exposed in the far northwest corner of the property next to the Pawnee claims. There, a thin veneer of up to 100 m of highly sheared and carbonated mafic and ultramafic volcanics reflect the presence of the Cadillac-Larder Lake Break along the north contact of the Lebel Stock. North of the Tisdale assemblage is a narrow wedge of variably altered and sheared Timiskaming assemblage sediments that are part of the North Break – Cadillac-Larder Lake Break lozenge described on the Pawnee property. There is only about 300 m of exposure on this part of the Timiskaming assemblage before the north boundary of the property with the Pawnee lands.

Less is known about the flanking Tisdale assemblage mafic to ultramafic volcanics and iron formations around the balance of the Lebel syenite stock due to limited access, lack of prior work, and, in the far eastern sector, the start of the broad sand plain that forms part of the Munro esker.

Within the far eastern sector, however, Darmac Gold Mines held 26 claims between 1946 and 1950, on which four x-ray drillholes and 8 AXT-size holes were drilled (data incomplete – only logs for AXT holes 1, 2, 3, 7, 8). They reported carbonated andesites to basalts and carbonate rocks with heavy iron sulphides and gold assays up to 0.36 oz over 6 ft (12.34 g/t over 1.8 m) in AXT hole 2. Three of these holes (1, 2, and 3) are on current claim 1047121, and, one x-ray hole on current claim 1046952 (Fig. 15). The Darmac data were not validated via relogging and check assays by the Resident Geologist and Dominion Gulf in 1951. Development of mica was common, but strong alteration and carbonate rocks indicated by Darmac were not noted. Canico came to a similar conclusion in 1979, that the 1946 gold assay was felt to be suspicious. The package occurs at the east margin of the Lebel Stock and its contact aureole. The sequence is a mix of variably metamorphosed basalt, tuff and iron formation with numerous dykes of syenite, mafic syenite and diabase.

Mineralization detailed in past work is most often related to alteration and veining associated with the Cadillac-Larder Lake Break and North Break lozenge systems as on the south part of the Pawnee lands.

## 17.3 Exploration, Drilling and Recommendations:

As part of the Pawnee project, a grid was established in the western sector of the Lebel Stock property during the Queenston – Franco-Nevada joint venture. Magnetic, VLF-EM and geological surveys were completed in 1998 and 1999, and, three holes (1,398 m) were drilled between February and March, 2000. Two drillholes (PW-00-01 and 02), some 1.2 kms apart tested the South Break structure, and, one hole (PW-00-03) was drilled further north into the Cadillac-Larder Lake Break environment (Fig. 16).

Drillhole PW-00-01 tested the western flank of the Lebel stock and extended northward into Tisdale assemblage ultramafics and ultramafic komatiites (from 238.1 m to the end of the hole at 474.4 m). The syenite / ultramafic contact was faulted but the main part of the South Break was intersected from 46.3-186.2 m, as a zone of blocky to broken core with sheared, fractured, brecciated and gouged sections. No significant gold values were encountered.

Drillhole PW-00-02 was collared 1.2 km east, toward a more central part of the Lebel Stock, where a potential splay feature extended from the South Break to the Cadillac-Larder Lake Break (Fig. 16). It similarly encountered a broad, blocky to broken zone with gouge interpreted to represent the South Break from 81.5-211.0 m. The drillhole also contained two units of ultramafic to ultramafic komatiite within the syenite complex from 81.9-95.9 m, and, 243.6-393.4 m. The upper ultramafic unit was at the start of the stronger faulting associated with the South Break. The lower unit contained erratic sheared and gouged intervals but was considerably less deformed. No significant gold values were encountered.

Drillhole PW-00-03 was collared 1,100 m north of PW-00-02 in the Cadillac-Larder Lake Break environment at the north contact of the syenite stock (Fig. 16). The hole started in syenite to 67.8 m, followed by altered and deformed carbonate rocks (67.8-182.7 m), variably amphibolitized ultramafic rocks (182.7-250.8 m), tuffs and sedimentary rocks (250.8-374.1 m), a second carbonate zone (374.1-418.2 m), and, sediments from 418.2 m to the end of the hole at 471.3 m.

The sequence in hole PW-00-03 is similar to the surface mapping and prior work detailed on the adjacent Pawnee lands. The first carbonate zone, from 67.8-182.7 m, is interpreted to reflect the Cadillac-Larder Lake Break in Tisdale assemblage rocks. The second carb zone (374.1-418.2 m)

is within the tuffaceous and sedimentary package with variable alteration and shearing, described as the North Break lozenge on the Pawnee property. The rocks are variably sheared and altered throughout the drillhole. The start of the Timiskaming assemblage is suggested at 250.8 m, along the base of the main ultramafic package (182.7-250.8 m).

The Cadillac-Larder Lake Break environment in hole PW-00-03 was weakly anomalous in gold content with a best assay interval of 0.15 g/t over 3.8 m, from 99.4-103.2 m. A very narrow quartz vein, hanging wall to the second carbonate zone assayed 8.86 g/t over 0.1 m from 363.0-363.1 m (adjacent assays were minimal). The second carbonate interval was only weakly anomalous with assays to 0.12 g/t.

On the Munro project side of the Lebel Stock property, drilling on the regional structures occurred on the adjacent Cunningham and Munro lands. Linecutting, magnetic, VLF-EM and geological surveys were completed over the gridded area in 1998 and 1999, and, an IP survey from the adjacent Munro and Cunningham lands covered the northern fringes of the property in 2001.

In early 2005, the east part of the Pawnee project grid was freshened to accommodate an IP survey by Belanger Geophysics of Rouyn, Quebec (see Pawnee property for survey details). The south half of the survey was on Lebel Stock lands. It covered the hanging wall (south) environment of the Cadillac-Larder Lake Break, the South Break structure, and, the Long Lake cross fault.

Only one of the main anomalies outlined in the survey occurs on the Lebel Stock claims. The anomaly is hanging wall to the Cadillac-Larder Lake Break, and, at an angle of 45 degrees to the regional feature. It is in an area where there are a series of outcrop ridges and local traces of magnetite in the system, such that its source is in doubt.

The Long Lake cross fault is represented by a well defined low resistivity and low phase corridor without any anomalous features. The South Break structure is more poorly defined in the survey, but appears to be characterized by a resistivity low zone with local weak phase anomalies in both the hanging wall and footwall locations. A soil geochemical survey by Queenston personnel in May 2005, did not enhance the IP targets occurring on the Lebel Stock lands.

As noted on the Pawnee property, an in-house memo recommended six drillholes (3,000 m) to follow up the IP and geochem results. One of these holes is on the Lebel Stock property. It targets the South Break environment with an associated weak IP response.

Drilling on the Cadillac-Larder Lake Break / North Break lozenge area has shown that the ingredients of alteration and structure are present on the Lebel Stock lands. Given the limited amount of exposure, however, further work in this environment is best planned in conjunction with the Pawnee claims where a more complete section is present.

The South Break is an interesting target. The presence of substantial units of ultramafic well within the syenite complex suggest that the structure is more regionally significant than initially thought. In addition to the drillhole recommendations from the IP survey, further drilling appears warranted but should await those results on the Pawnee lands should the IP and geochem surveys be successful tools in discriminating target selection.

# **18.0 CUNNINGHAM PROPERTY**

## **18.1 Description, Location and History:**

The Cunningham property consists of 27 claims in east central Lebel Township (Fig. 13). Five claims are patented for mining rights and surface rights. The remaining 22 claims are unpatented. The original 24 claims are subject to a 2% NSR royalty and the Newmont royalty. Claim specifics are detailed in Appendix A. The property is contiguous with the Pawnee property (north), the Lebel Stock property (south), and, the Munro property (east).

Like the eastern part of the Lebel Stock property, the Cunningham claims were worked as part of a larger Munro project consisting of the Munro, Cunningham and Lebel Stock lands. The property is covered by grid lines trending due north, spaced 400 ft apart. Lines were initially established in 1999.

Highway 66 and the Ontario Northland railway cut the far northern part of the Cunningham claims. Further east, a well maintained road along the Lebel / Gauthier township line connects Highway 66 to the Kirkland Lake landfill. A series of cottage roads, drill roads and bush trails from the township line road, provide relatively convenient access onto the Cunningham part of the grid.

The Cunningham claims essentially cover the northeast part of the Lebel Stock, which is characterized by a hummocky terrain. The property is just west of the jack pine forest of the Munro esker sand plain such that the bush is mixed. Jack pine, poplar, birch, spruce and fir are common in the hummocks to low-lying ridges, with spruce and alder swamps to peat bogs in the lower lying ground. Several small lakes and creeks are present in the eastern part of the claim group with beaver dams and local flooding common. Outcrop exposure averages only 5-10% and is best developed in the northern parts of the claims. Relief is in the order of 40 m.

The history of the Cunningham property is partly tied to much larger claim blocks held by Rocamsa Mines, Erin Kirkland Mines, Canico (Inco) and Queenston. It is summarized as:

**1913**: Bouzan Mines; surface prospecting, 50-ft shaft on Cadillac-Larder Lake Break (location uncertain).

**1940-44**: Erin Kirkland Mines; 5 drillholes (1,106 m), holes 3, 4, 5, 6, 9 as part of a larger 10 hole program (2,754 m) extending onto Munro property.

**1944-45**: Rocamsa Mines; magnetic and geological surveys; 4 holes (415 m) as part of larger program onto Pawnee claims – holes 1-4 incl.

**1976-78**: Canico; magnetic, IP and geological surveys.

**1987-88**: Chelsea Resources; 32 drillholes (7,189 m), 2 further drillholes (88-12 and 14) not filed. **1991-92**: Cunningham, L. J.; magnetic and geological surveys; stripping and trenching; 4 drillholes (599 m).

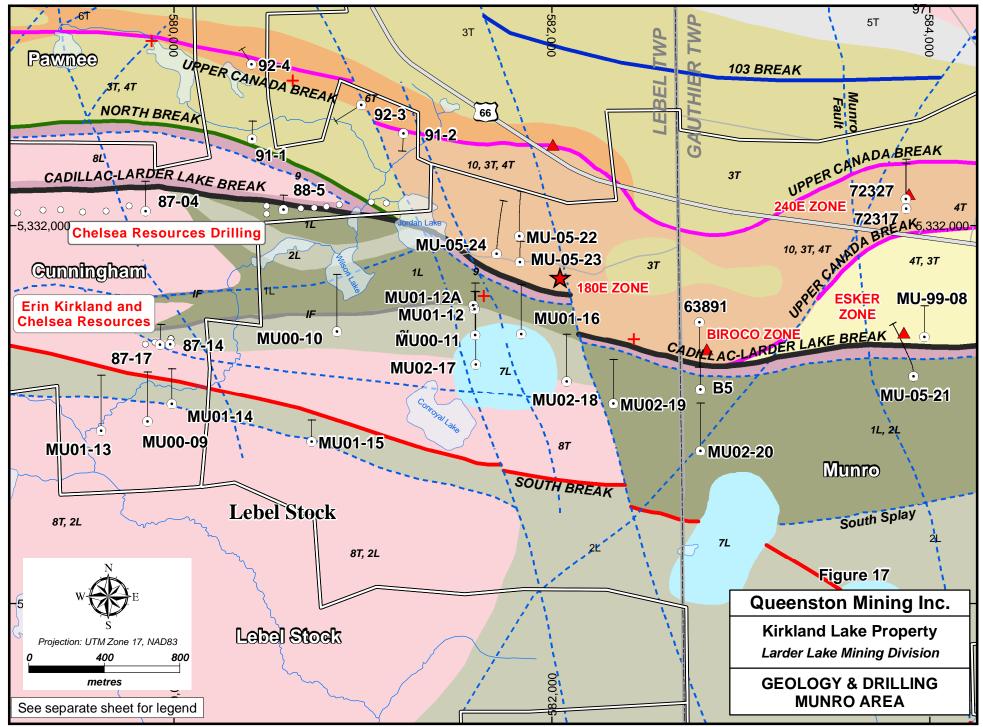
**1996-2001**: Queenston – Franco-Nevada joint venture; magnetic, VLF-EM and geological surveys; IP survey in 2001; 3 drillholes MU-9, 13 and 14 in 2000 and 2001 (1216 m). **2002-06**: Queenston Mining; no new work undertaken.

There is no past production on the Cunningham claims, and, no resources currently exist.

# 18.2 Property Geology and Mineralization:

The Cunningham claims cover the northeast margin of the Lebel Stock syenite complex. The north contact of the complex is essentially along the Pawnee / Cunningham property boundary and is accompanied by variable carbonate alteration and shearing related to the North Break (Fig. 14). The North Break follows the syenite contact in this area, merging with the Cadillac-Larder Lake Break eastward, in the east part of the property near Jordan Lake. The North Break trends more southeasterly approaching the junction with the Cadillac-Larder Lake Break. Green carbonate rocks and talc-chlorite schists that have a Tisdale assemblage bias are locally noted in the North Break, although the general inference is that the North Break separates the syenite complex from Timiskaming assemblage trachyte flows, tuffs and sediments. Reverse faulting associated with these regional structures and splays may account for the local presence of ultramafic along this feature.

Data collection and interpretation have often been hampered on the North Break structure in the past, due to property boundaries. One hole (91-1), tested the North Break structure on the Cunningham lands (Fig 17). It intersected a strong, 30 m, fault zone with substantial lost core (85%), and, rubble fragments of talc-chlorite schist, green carbonate and altered syenite. No significant gold values were encountered.



The Cadillac-Larder Lake Break is some 200 to 300 m south of the Pawnee / Cunningham boundary. It trends more easterly in this sector, merging with the North Break splay in the vicinity of Jordan Lake. The Cadillac-Larder Lake Break is localized within the syenite complex in the western half of the property, subsequently following the Tisdale assemblage / syenite contact in the middle of the property, and, the Tisdale assemblage / Timiskaming assemblage contact east of the merger with the North Break. It too is characterized by talc-chlorite schists and green carbonate alteration, along with strong shearing, blocky to broken core with gouge, variable amphibolitization (including riebeckite) and sheared syenite, and, is 30 to 100 m thick.

The Cadillac-Larder Lake Break was cross-sectioned at roughly 120 m centers by 28 drillholes during the Chelsea Resources program in 1987-88. Anomalous gold values were found associated with the break from 1.23 g/t over 1.9 m in pyritic, altered sediments (hole 87-4), to, 0.22 g/t over 40.3 m in mineralized syenite, footwall to the break (hole 88-5). Intersections, however, were erratic and no continuity of anomalous mineralization was established (Fig. 17).

Further south (1000-1300 m), the South Break structure tracks across the southern part of the Cunningham property. It is totally within the syenite complex on the Cunningham lands, and, has a more westerly trending splay that angles onto the Lebel Stock property to the west.

Three holes were drilled into the South Break structure during the Queenston – Franco-Nevada joint venture. Drillhole MU-00-09 in 2000, was followed up by drillholes MU-01-13 and MU-01-14 after an Induced Polarization survey in 2001 (Fig. 17). As noted in the Lebel Stock property drilling, more than 4 km west, the South Break system contains a substantial thickness (to 150 m) of Tisdale assemblage mafic and ultramafic volcanics wedged within the syenite complex. Here, the northern Tisdale assemblage / syenite contact is characterized by variable amphibolitization, brecciation, shearing and gouge, followed by deformed, altered, silicified, brecciated, veined and mineralized (pyrite) syenite in the footwall (i.e. north). Gold values in this environment were minimal. A best assay of 0.88 g/t gold over 0.55 m (hole MU-00-09), was encountered well below the South Break structure in altered, mineralized syenite, hanging wall to a xenolith of ultramafic. Gold was weakly anomalous hanging wall to the South Break in hole MU-01-13 with 0.27 g/t over 3.41 m, and, 0.15 g/t over 17.26 m, but was not particularly anomalous in drillholes MU-00-09 and MU-01-14.

North of the Cadillac-Larder Lake Break and North Break, the Upper Canada Break extends eastward from the Pawnee property onto a thin strip of claims in the north part of the Cunningham lands. The Upper Canada Break has been potentially tested by two holes drilled by Cunningham in 1991 and 1992 (holes 91-2, 92-3) – Fig. 17. Both drillholes encountered anomalous gold in

pyritic, hematitic, carbonatized and brecciated trachyte flows associated with faulting although assays were weak as: 0.24 g/t over 5.79 m in hole 91-2, and, 0.15 g/t over 7.01 m in hole 92-3. The trace of the Upper Canada Break is also in doubt in this area due to a complex array of faults and cross faults along the eastern margin of the property.

The 103 Break lies north of the north boundary of the claim group.

In addition to the presence of several of the regional breaks, the east margin of the Lebel Stock is cut by a number of shears subparallel to the regional structures, splay features and cross faults related to the intrusion of the syenite complex and its contemporaneous to subsequent deformation history. In-rafted segments of Tisdale assemblage volcanics and iron formation, along with draping of units around the intrusion and contact metamorphism complicate the picture, which becomes further obscured by overburden cover in the eastern limits of the property, particularly in the Tisdale assemblage rocks.

Within this more chaotic window, a secondary iron formation target was developed in the past. The iron formation is part of the Tisdale assemblage mafic and ultramafic suite that is variably faulted, altered and metamorphosed next to the syenite stock. Erin Kirkland Mines drilled five holes in the period 1940-44 as part of a larger ten-hole program in southeastern Lebel Township (Fig. 17). Assays were not reported for the drilling or in the relogging by Dominion Gulf in 1948, but interesting veining and mineralization were noted in altered iron formation. One hole by Rocamsa Mines in 1944-45 was abandoned in iron formation, due to drilling problems. Chelsea Resources drilled 6 of their 34 drillholes on the iron formation target as well, encountering best assays of 1.41 g/t over 4.7 m in hole 87-14, and, 3.72 g/t over 2.65 m in hole 87-17 (Fig. 17). Follow-up drilling in 1988, however, failed to enhance the target due to the presence of the Lebel Stock contact.

North of the variably altered, faulted and contact metamorphosed Tisdale assemblage are Timiskaming assemblage trachyte flows, tuffs and sediments. The stratigraphic package is the eastward extension of the Pawnee sequence, east of the Long Lake cross fault. Aside from the Upper Canada Break environment, the potential of the package is highlighted by Cunningham drillhole 92-4 which tested two, altered trachyte flow units 60 to 100 m south of the Upper Canada Break (Fig. 17). The northernmost of these two altered flows assayed 0.72 g/t over 5.64 m, associated with fine quartz-carbonate veining and up to 2% disseminated pyrite.

## 18.3 Exploration, Drilling and Recommendations:

No new work has been undertaken on the Cunningham property since 2001. The property, however, has a number of interesting targets given the presence of the Upper Canada Break, North Break, Cadillac-Larder Lake Break and the South Break, as well as a complex array of faults, cross faults and splays that appear related to the emplacement of the Lebel Stock, and, subsequent phases of deformation. In the past, the Cadillac-Larder Lake Break and a secondary iron formation target in Tisdale assemblage rocks received the most attention, partly due to boundary restrictions. Today, the property can be more fully integrated into the adjacent lands with particular attention to the Pawnee and northern Munro groups. In that area, the North Break and the Upper Canada Break remain underexplored structures. Historic, reconnaissance IP data by Canico (Inco) in 1976-78, indicate that targets exist. An initial program of three drillholes (1,200 m) on the Upper Canada Break and six holes (2,400 m) on the North Break, utilizing the historic IP data would move the database forward. The drilling would also initiate a platform from which to establish a fence of holes across the system.

The Cadillac-Larder Lake Break appears adequately tested at this point on the Cunningham lands.

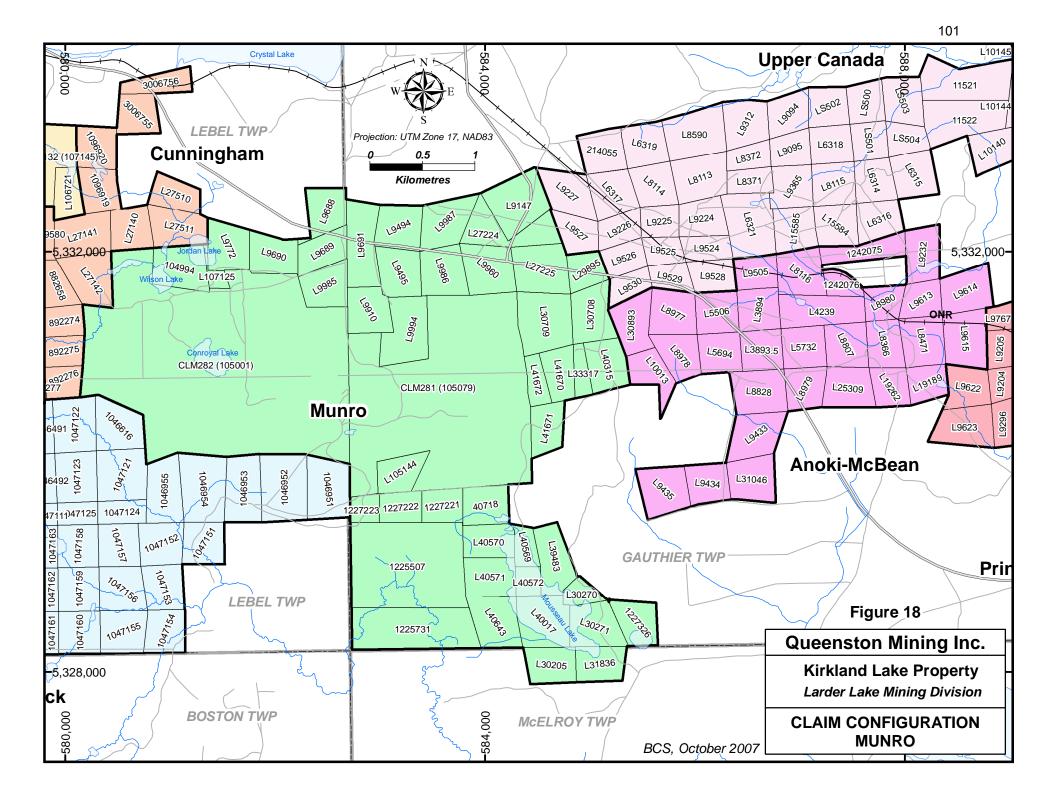
The South Break is also an underexplored target on the Cunningham lands. This structure is strong, well altered and mineralized but, to date, gold values have been lacking. To that end, two, wildcat holes (800 m) on the Cunningham lands could assist in defining the potential of this newest of the regional structures.

A estimate for the program is 4,400 m of diamond drilling.

### **19.0 MUNRO PROPERTY**

# **19.1 Description, Location and History:**

The Munro property consists of 103 claims in southeastern Lebel and southwestern Gauthier townships, as well as two claims in northwestern McElroy Township (Fig. 18). The property contains a mix of patented (36), unpatented (13) and leased (54) claims. The five patented claims in Lebel Township and the 12 patented claims in southwest Gauthier and northern McElroy townships (around Mousseau Lake), are patented for mining rights only, with the remaining 19



patented claims in the northeast part of the group (Gauthier Township), being patented for both mining and surface rights. The majority of the leased claims are leased for mining rights only with two claim units in Lebel Township (lease 107125), and, one claim in Gauthier Township (lease 105114) being leased for mining rights and surface rights. All of the leased claims (54), and 24 of the patented claims are subject to the royalty for Inco Ltd. of a 1.3% NSR after 300,000 oz of gold have been extracted from 107 claims comprising the Anoki-McBean and Munro properties. All of the claims are subject to the Newmont royalty. Claim specifics are detailed in Appendix A.

The property is contiguous with the Cunningham claims (west), the Lebel Stock property (southwest), the Upper Canada property (northeast), and, the Anoki-McBean property (east).

The property is covered by a grid system trending due north that extends westward onto the Cunningham claims and southward onto the north part of the Lebel Stock property. The grid was cut in various stages between 1996 and 2001. It is a re-establishment and expansion of the former Canico grid (1976-1989). Lines are spaced 200 ft apart with 400-ft intervals over the west part of the property (west of line 164E). As a point of reference, the Lebel / Gauthier township line is along grid line 200+00 E (East). Thus the grid from 120+00 East to 200E is in Lebel Township (west), and, lines from 200E to 288+00E are in Gauthier Township. Some of the mineralized zones are identified by their grid coordinates such that the 180 East Zone is 2,000 ft (610 m) west of the township line in Lebel Township, while the 240 East zone is 4,000 ft (1,220 m) east in Gauthier Township.

Highway 66 cuts the north part of the claim group with ready access southward via two main roads. A well maintained, municipal road along the Lebel / Gauthier Township line leads to the Kirkland Lake landfill site (within the claim group), and, a bush road in the east part of the property extends southward to Mousseau Lake and some actively logged areas. There are also a number of cottage roads, drill roads and trails leading from the township line west and south into Lebel Township.

The Munro property derives its name from the Munro esker – a 3 to 5-km wide sand plain over roughly 95% of the claims. The sand plain reaches depths in excess of 100 m. Other than a few scattered exposures in the northern reaches of the claim group, outcrop is absent. The eastern margin of the group has been recently logged but the balance of the land is covered by clean stands of jack pine over the esker complex with additions of poplar, birch and spruce in areas of more variable topography further west. Topographic relief is minimal, varying from 10 to 20 m.

The Munro property hosts four mineralized zones identified as 180 East, Biroco, Esker and 240 East. The 180 East Zone is centered along line 180+00 E in Lebel Township and is the only feature with a historical mineral resource. The Biroco Zone straddles the Gauthier / Lebel township boundary, while the Esker and 240 East zones are in Gauthier Township (Fig. 19).

The history of the Munro Group is summarized as:

**1940-44**: Erin Kirkland Mines; 5 drillholes (1,647 m), holes 1, 2, 7, 8, 10 as part of a larger 10-hole program extending onto the Cunningham claims.

**1944-50**: Biroco Kirkland Mines; north part of claim group; geophysical surveys, 24 drillholes, Biroco Zone discovered (6 holes drilled), Esker Zone indicated by visible gold in drillhole B24 (no assays available).

**1976-89**: Canico (option); geophysical surveys (mag and IP), mapping, reverse circulation drilling and extensive diamond drilling; 15 drillholes on Biroco Zone; IP response tested in 1979, discovering Esker Zone - 18 drillholes on Esker Zone; 180 East Zone discovered by cross-sectional drilling away from Biroco zone in 1988 - 25 drillholes (5,905.26 m); 240 East Zone discovered by cross-sectional drilling in 1988 - 6 drillholes in total on the 240 East Zone; additional stratigraphic drilling and testing of geophysical targets.

**1996-2001**: Queenston – Franco-Nevada joint venture; geophysical surveys (mag, VLF, IP), mapping; 13 drillholes (5,445 m).

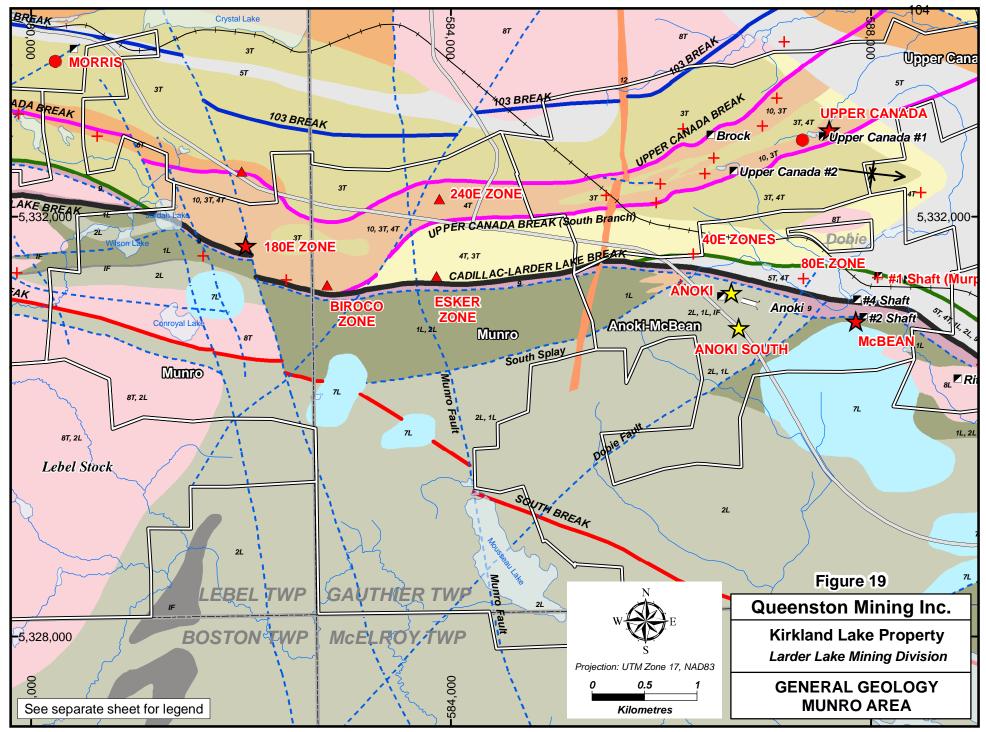
**2002-06**: Queenston Mining; 2 phases diamond drilling, 4 holes (2,360 m) in 2002; 4 holes (1,789 m) in 2005.

There is no past production on the Munro claims.

# 19.2 Mineral Resources:

The 180 East Zone in eastern Lebel Township is the only zone with a historical mineral resource. RPA (1996) reviewed a 1989 resource calculation by Inco Exploration and Technical Services on the 180 East Zone of 326,587 t grading 4.11 g/t, based on a minimum thickness of 3 m, and, a cutoff grade of 3.3 g/t. RPA (1996) classified the resource as indicated since it was defined by diamond drilling, but felt that the mineralization had a limited depth extent and limited economic potential due to its shallow dip and overburden cover.

The east part of the 180 East Zone extends to the bedrock surface under 30 to 55 m of overburden. The resource is derived from nine drillholes. It is 183 m by 91 m in size, and, up to 13.7 m thick. The zone dips at 15 degrees southwest, has a flat plunge of 35 degrees northwest, and, is open to the west, southwest and east (Inco Exploration and Technical Services, 1990). The resource is considered historic. It is not conformable to NI 43-101 and should not be relied upon as it has not been verified by a Qualified Person.



BCS, October 2007

## **19.3 Property Geology and Mineralization:**

The geology of the Munro property is not well understood given that the density of drillholes is considerably less in this area, and, most of the claims are covered by up to 100 m of sand and gravel related to the Munro esker.

Less data were available to Canico in 1976. They approached the problem via linecutting, magnetic surveys and geological mapping over the entire group, followed by reconnaissance IP on lines 800 ft apart, reverse circulation drilling along grid lines spaced 1,600 ft apart in Lebel Township, and, fences of diamond drillholes at selected intervals to establish the stratigraphy. The fences of drillholes were parallel to the grid at first (as lines 200E and 296E), later shifting to northwest-southeast orientations. The Queenston – Franco-Nevada joint venture followed up with additional magnetic, VLF-EM, and IP surveys, further mapping and diamond drilling. The current database is far superior to the 1976 vintage, but correlation remains difficult in this environment.

The north part of the claim group is cut by the Cadillac-Larder Lake Break (Fig. 19). The break strikes easterly in this area and dips south. It separates Timiskaming assemblage alkalic volcanics and sediments (north) from older Tisdale assemblage mafic to ultramafic volcanics with units of iron formation (south). The western and southern portions of the group are affected by the Lebel Stock. Reverse circulation drilling indicates a relatively broad corridor of syenite and contact metamorphosed Tisdale assemblage rocks along the southern limits of the property in Lebel Township. Dioritic to gabbroic intrusives are also noted in this sector from the reverse circulation drilling results (Fig. 19). This is also the host environment to the South Break.

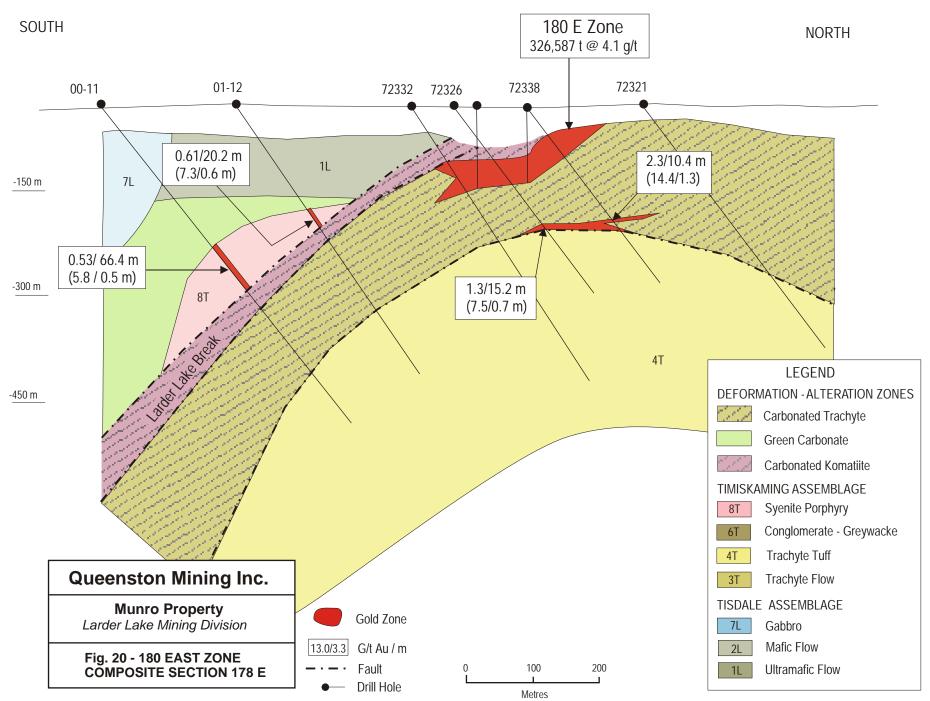
The South Break occurs some 1,100 to 1,400 m south of the Cadillac-Larder Lake Break. It trends east-southeasterly from the Cunningham lands and extends off the property near the northern end of Mousseau Lake in southern Gauthier Township. The South Break was first interpreted from magnetic and VLF-EM surveys in consort with the reverse circulation drilling on the Munro claims. It was tested by one hole (MU-01-15) on the Munro property in 2001 after the drilling (three holes) on the Cunningham lands (Fig. 17). The break was defined by south-dipping, strongly deformed and gouged mafic and ultramafic rocks. Only the base of the break (12 m) was tested via hole MU-01-15. It was followed by 29 m of strongly altered, deformed and mineralized syenite but gold values were low.

The western part of the property, from the Lebel / Gauthier township line westward, is cut by a series of north-northwest trending cross faults (Fig. 19). The cross faults seriously hamper correlation between the widely spaced drillholes. This sector is almost a mirror image of the Amalgamated Kirkland – Rand environment, where the north to north-northeast trending Murdoch Creek cross fault becomes a series of sheared and mylonitized zones. The cross faults offset the regional east-northeast faults and the stratigraphy in a left-handed lateral sense in the AK – Rand area. The reverse is true in the west part of the Munro group. The regional Cadillac-Larder Lake Break and South Break features strike east-southeasterly and are displaced in a right-handed lateral sense by the cross faults. Further, the Upper Canada Break is spawned from the cross fault / Cadillac-Larder Lake Break environment on the AK – Rand area, and, a southern branch of the Upper Canada Break is indicated east of the cross faulting on the Munro property, also splaying from the Cadillac-Larder Lake Break.

A more prominent cross fault, labelled the Munro Fault is located between the Esker and Biroco mineralized zones (Fig. 19). It similarly has a right-handed lateral sense of displacement and correlates with a valley in the Esker sand plain. Unconfirmed rumours suggest a fault-related, buried valley with up to 224 m of overburden material. The vicinity of this feature has been avoided by diamond drilling.

To date, the main zones of mineralization on the Munro property are all located within Timiskaming assemblage rocks north of the Cadillac-Larder Lake Break. The 180 East Zone occurs on the gently dipping south limb of a fold structure. The zone strikes northwest with a flat dip to the southwest, and, a flat, northwesterly plunge. Mineralization is largely confined to a highly altered, brecciated and mineralized trachyte flow unit in the order of 30 m thick (Fig. 20). The trachyte flow grades into a thicker package of trachyte flows, tuffs and agglomerate (100 m thick) before a more sedimentary to volcaniclastic package of gritty tuffs, lapilli tuff, wackes and conglomerates is encountered further north. Southward, the trachyte flow unit is in disconformable contact with Tisdale assemblage ultramafic komatiites. That contact is locally faulted by the Cadillac-Larder Lake Break.

The historic resource on 180 East Zone occurs within the 30 m, altered, brecciated, and mineralized trachyte flow sequence containing an average of 5 to 7% pyrite. Gold values tend to occur with the better mineralized sections – a mix of fine dusty pyrite along with coarser, streaky to fracture controlled material is preferred. Stronger mineralization is developed approaching the crest of a flat, antiformal fold feature (Fig. 20). Veining is present but appears to be of lesser importance. The orange red trachyte host is variably silicified, ankeritic and sericitic and may



have undergone some degree of potassium metasomatism. Ankerite, hematite and pyrite are present in the mineralized zones versus calcite and magnetite in the less altered rocks.

South and west of the 180 East Zone, large low-grade intersections are encountered down-dip of the 180 East mineralization (Fig. 20). These large, low-grade zones transgress a syenite – trachyte contact and are characterized by strong ankerite alteration plus brecciation and veining, suggesting an element of structural as well as stratigraphic control. In the most westerly of these sections (164+00 E), windows of Tisdale assemblage mafic and ultramafic volcanics, and, iron formation units are found in the system, an apparent function of the north to north-northwest crossfaulting that confuses the stratigraphic picture. Drillhole MU-00-11 on line 164+00 East intersected 0.53 g/t gold over 66.4 m, and, drillhole MU-01-16 on 172+00 East encountered 0.52 g/t over 70.6 m, with a best interval of 2.03 g/t over 4.5 m (Fig. 17). The better grade intervals within the broad low-grade zones were either too narrow or too low grade to warrant a resource estimate.

Drillholes MU-00-11 and MU-01-12 on line 164+00 East are presented on the composite section for 178E (Fig. 20) to indicate the relative positions of the low-grade intersections with respect to the 180 East mineralization.

The geology of the Biroco Zone is most like the adjacent 180 East Zone stratigraphy (Fig. 17). The relationship between these two systems, however, is complicated by cross faulting and a 250 to 300 m, north-striking, magnetic suite of pyroclastic rocks that sits between the two zones. The magnetic suite crudely defines a fold closure on the 180 East Zone.

Like the 180 East Zone, the Biroco system is characterized by altered and mineralized Timiskaming trachyte flows and breccias, although it generally has a higher percentage of tuffaceous rocks. Unlike the 180 East Zone, there is no clear evidence that the mineralizing system transgresses the stratigraphy, extending southward from the Timiskaming assemblage into the older ultramafic komatiites and basalts. The orientation of the broad mineralized zones is unclear due to several factors including (but not limited to) the strike and dip of the stratigraphy, the presence of the Cadillac-Larder Lake Break, the variations in the azimuths of the drillholes, and, the lack of depth information due to varying priorities in past exploration programs.

The broad mineralized zones on the Biroco property are characterized by strong alteration, fracturing to brecciation, and, 5 to 10% sulphides. Again, like the 180 East Zone, better gold values are most commonly related to elevated pyrite contents where there is a mix of fine dusty pyrite and coarser material as grains, blebs and fracture fillings. Chalcopyrite and molybdenite

are locally present in the higher grade portions. Trachyte flows are the preferred host although rubbled flow tops and tuffaceous sections are often found in most of the broader mineralized packages. Veining tends to be minimal.

Examples of better-mineralized sections within the Biroco zone include 1.07 g/t gold over 123.48 m (including 3.72 g/t over 10.67 m) in Canico drillhole 63891, and, 1.25 g/t gold over 70.95 m (including 4.17 g/t over 9.15 m) in Biroco hole B5 (Fig. 17). No resource estimate has been attempted due to a lack of continuity that is largely related to the unclear orientation of the mineralized zones.

The Esker Zone occurs within a package of Timiskaming trachyte flows, tuffs and mafic tuffs just east of the north-trending, Munro cross fault that separates the Esker Zone stratigraphy from the Biroco rocks (Fig. 17). Two zones are recognized (north and south). Both are associated with sulphide-rich, magnetite-depleted corridors in moderate to strongly magnetic rocks. The zones strike east to east-northeast and dip steeply south. The two zones are 60 to 120 m apart. The western extension of the south zone is poorly defined due to a lack of drill information and the encroachment of the Cadillac-Larder Lake Break.

The south zone is located within trachyte flows and tuffs above a broad zone of mafic tuff. In addition to magnetite depletion, pseudoleucite development is common in the south zone. Mineralization is characterized by ankerite alteration and bleaching within the spotted (pseudoleucite) trachyte flows and tuffs. Pyrite contents are elevated to 3-5%. Veining is minimal. The north zone is associated with elevated carbonate (both ankerite and calcite) and pyrite in the dark, amphibolitic, mafic tuff member that dominates the Esker Zone stratigraphy. The north zone is more anonymous in appearance given that pyrite contents are only slightly elevated and carbonate alteration is weak to moderate. There are scattered fine flecks of visible gold in the north zone. Veining is minimal.

The only drillhole into the Esker Zone stratigraphy during the Queenston – Franco-Nevada joint venture, MU-99-08, intersected 7.64 g/t gold over 2.74 m in the south zone, and, 1.95 g/t over 8.93 m (including 11.46 g/t over 1.07 m) in the north zone (Fig. 17). No resource estimate has been undertaken on the Esker Zone intersections.

The 240 East Zone was discovered by Canico in 1988 through sectional drilling in the northwestsoutheast orientation. The object of the drilling was to test the westward extension of a break system from the Upper Canada property onto the Munro Group. Drillhole 72317, drilling true north on line 240E, intersected 4.56 g/t gold over 7.04 m from 670.1-693.2 ft, including 8.06 g/t over 2.71 m (Fig. 17). Four drillholes bracketed the intersection – the overcut and the undercut holes intersected mineralization but no continuity was established in the adjacent holes. The best intersection in the follow-up drilling was 2.43 g/t gold over 6.1 m in the uppercut hole 72327.

The 240 East Zone occurs within a package of intercalated Timiskaming mafic and trachytic tuffs. The trachytic members are the preferred host. They are more orange stained, potassic, ankeritic and sericitic than the dark calcitic, chloritic, biotitic, mafic tuff sections. The mineralized zones are characterized by 1 to 8% disseminated to streaky and fracture-controlled pyrite, and, like the Esker zone (700 m due south), are normally depleted in magnetite. Milky to orange quartz-feldspar-ankerite stringers are present within the system but tend to show no correlation with assay values.

Mineralization associated with the disrupted iron formation units that flank the Lebel Stock on the Cunningham lands (west) was tested by one drillhole during the Queenston – Franco-Nevada joint venture. Hole MU-00-10 collared in syenite (to 96.2 m), followed by the ultramafic and mafic suite with units of iron formation (Tisdale assemblage), ending in a broad deformation corridor from 350 to 532 m (Fig. 17). Assays were weak and erratic in the drillhole, with a best assay of 0.46 g/t over 0.91 m in the deformation zone near the end of the hole. The follow up to hole MU-00-10 tested the suite with iron formation 2,400 ft (732 m) further east where a change in the magnetics suggested possible magnetite depletion and cross faulting. Hole MU-00-11 encountered the first of the broad, low-grade zones (0.53 g/t gold over 66.4 m), down dip of the 180 East Zone mineralization discussed above. This area became the primary target for the phase one drilling that followed in 2002.

## 19.4 Exploration, Drilling and Recommendations:

In October 2002, Queenston commenced the first of two phases of diamond drilling. Phase I consisted of four holes (2,360 m) drilled between October 9 and December 18, 2002 (drillholes MU-02-17 to MU-02-20 inclusive). Phase II included four holes (1,789 m) drilled between September 28 and October 28, 2005 (drillholes MU-05-21 to MU-05-24 inclusive). Both phases were contracted to Benoit Diamond Drilling of Val d'Or Quebec. The core size was NQ.

For drillhole locations, refer to Fig. 17.

Drillholes were spotted via grid coordinates in the field. The core was logged by Queenston personnel using a k-edit format that was subsequently loaded into the logii system – the

geological software used. Given that the Munro sand plain is generally flat, elevations for the new drilling were able to be estimated from available survey data including previous drill collars.

The Phase I drill campaign was designed as substantial step-outs to the broad zones of lowgrade mineralization previously encountered down-dip of the 180 East Zone. Drillhole MU-02-17 was collared 150 m south of prior hole MU-00-11, while the other three holes were in the order of 300 m south of previous drilling (Fig. 17).

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	
	(ft)		(m)	(m)	(m)	Width	(g/t)	Comments
MU-02-17	16400E/11500N	-57	389.6	392.4	2.8	n/a	1.18	Trachyte tuff
	including		390.5	391.4	0.9	n/a	2.24	
			591.6	593.5	1.9	n/a	0.78	Trachyte tuff
			692.7	694.5	1.8	n/a	0.70	Trachyte
			707.3	711.7	4.4	n/a	0.50	Trachyte pyritic
	_		766.8	767.7	0.9	n/a	1.09	Trachyte tuff
MU-02-18	18000E/11200N	-55	336.3	364.0	27.7	27.1	0.23	Trachyte + tuff
	including		338.1	338.7	0.6	0.6	2.06	Pyritic section
			400.8	401.8	1.0	1.0	3.72	Trachyte tuff
			409.4	409.9	0.5	0.5	3.03	Trachyte tuff
MU-02-19	18800E/10800N	-60	161.4	164.7	3.3	n/a	0.81	Felsite, pyritic
	including		162.1	162.7	0.6	n/a	2.69	
			366.5	399.7	33.2	30.1	0.21	Trachyte pyritic
	including		369.3	373.2	3.9	3.5	0.57	
MU-02-20	20300E/9950N	-60	319.7	356.7	37.0	37.0	0.35	Biroco area
								Trachyte pyritic
	including		333.5	335.3	1.8	1.8	1.30	
			373.2	375.0	1.8	1.8	0.54	Trachyte

n/a – insufficient data to establish a true width.

All of the drillholes encountered broad zones of anomalous gold mineralization in Timiskaming alkalic volcanics. In general, the mineralization was neither as strong nor as continuous as the prior work. Drillhole MU-02-17, closest to any of the previous drillholes, had a number of corridors of anomalous gold values in the 100 to 200 ppb (parts per billion) range but the mineralization was not as concentrated nor as continuous as that found in up-dip hole MU-00-11 which hosted 0.53 g/t gold over 66.4 m. The best section in hole MU-02-17 assayed 1.18 g/t over 2.8 m. The

picture was also confused by the northerly-trending cross faults in this area which hamper correlation and estimates of true widths when the step-outs are substantial.

The broad, low-grade zones in the three remaining drillholes include 0.23 g/t over 27.1 m in drillhole MU-02-18; 0.21 g/t over 30.1 m in hole MU-02-19, and; 0.35 g/t over 37.0 m in MU-02-20.

Drillhole MU-02-19 also encountered a strongly anomalous gold intersection (0.81 g/t over 3.3 m) in Tisdale assemblage rocks. The gold values were related to a felsic dyke and associated alteration in the adjacent ultramafics. The intersection sits alone in space and, as such, its orientation and true width is unclear.

The Phase II drilling (4 holes – MU-05-21 to MU-05-24 inclusive) focused on the 180 East Zone (3 holes), and, the Esker Zone (first hole, MU-05-21).

Overburden depths varied from 60 to 100 m over the Esker Zone, such that the hole drilled to test the extension of the north and south zones was a large step-out (150 m), targeting a vertical depth of 450 to 500 m. The 180 East Zone drilling (3 holes – MU-05-22 to MU-05-24 inclusive) was planned to expand the mineralization northwest along the assumed strike of the zone. The dimensions of the 180 East Zone were small at 183 m by 91 m, and, up to 13.7 m thick. The holes tested the stratigraphy on lines 172 E and 168 E, some 136 and 274 m respectively along the strike of the historic resource, that was last defined on 176 E. Targets included the crest of the subtle, flat fold, and, magnetic low features.

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	
	(ft)		(m)	(m)	(m)	Width	(g/t)	Comments
MU-05-21	24000E/11150N	-65	201.0	203.1	2.1	n/a	1.43	Mafic tuff
			269.3	277.8	8.5	n/a	0.43	South Zone ?
								pyrite
MU-05-22	17200E/13700N	-55	99.0	105.1	6.1	n/a	0.34	Trachyte, pyritic
			199.1	203.7	4.6	n/a	0.81	Trachyte, pyritic
	including		199.1	200.4	1.3	n/a	1.47	
			323.1	346.0	22.9	n/a	0.40	Tuff, pyritic
	including		338.7	346.0	7.3	n/a	0.68	
	and		343.2	344.0	0.8	n/a	2.09	
			368.2	378.1	9.9	n/a	0.43	Tuff

Table 10: Munro Drilling Results, Phase II

MU-05-23	17200E/13250N	-55	89.0	91.0	2.0	n/a	0.94	Trachyte / ultramafic
								contact
			136.1	143.0	6.9	n/a	1.42	Trachyte, pyritic
	including		136.1	138.0	1.9	n/a	4.23	
			158.0	198.7	40.7	n/a	0.26	Trachyte, pyritic
	including		193.0	197.0	4.0	n/a	1.04	
MU-05-24	16800E/13400N	-60	37.0	50.1	13.1	n/a	0.62	Trachyte / ultramafic
								contact, pyritic
	including		43.8	46.9	3.1	n/a	1.32	
			298.2	301.2	3.0	n/a	0.27	Trachyte, pyritic
			352.4	356.0	3.6	n/a	0.59	Carb / ultramafic
	including		353.7	354.6	0.9	n/a	1.16	
			378.5	386.6	8.1	n/a	0.28	Trachyte, pyritic
			417.5	423.3	5.8	n/a	0.25	Tuff / agglomerate

n/a – insufficient data to establish a true width.

Esker Zone drillhole MU-05-21 encountered two zones, the lower of which potentially correlated with the south zone, albeit with a much flatter than anticipated dip. The south zone (0.43 g/t over 8.5 m from 269.3-277.8 m) was well above the target depth of 450 to 500 m. Correlation across the distance was not reliable. The Esker north zone was not intersected.

All three 180 East Zone holes (MU-05-22 to MU-05-24 inclusive) intersected mineralized trachyte units. Drillhole MU-05-23 (on 172E) exhibited a style most like the 180 East Zone, and, the best assay of the program of 4.23 g/t over 1.9 m, within a zone of 1.42 g/t over 6.9 m. All three holes contained thicker intervals of low-grade mineralization as: 0.40 g/t over 22.9 m in hole MU-05-22, including 2.09 g/t over 0.8 m; 0.26 g/t over 40.7 m in hole MU-05-23, including 1.04 g/t over 4.0 m, and; 0.62 g/t over 13.1 m, including 1.32 g/t over 3.1 m in hole MU-05-24. Drillholes MU-05-22 and MU-05-24 also contained a number of carbonated ultramafic units, carbonate sections and fault gouge at variable angles to the core axis, suggestive of both cross faulting and subsidiary faulting to the regional breaks. Correlation was difficult.

In both of the above drill campaigns, correlation suffers due to the substantial step outs from former drilling in a cross faulted environment. Broad zones of gold mineralization are encountered down dip and along strike of the 180 East Zone mineralization, however, higher grade portions were not intersected that could build on the existing historic resource. The 180 East Zone remains the best example of enriched gold in the system but the target is small. More conservative step outs are recommended. Also, drillhole MU-05-23, which sectioned its primary target but ended in mineralized trachyte, could be extended beyond its current depth to further

section the stratigraphy and assist in correlation. Further drilling, however, would be best assisted by 3D computer modelling of the 180 East Zone as a first step in guiding future programs. The modelling could potentially add a new perspective to the orientation of the Biroco Zone mineralization as well.

## 20.0 UPPER CANADA PROPERTY

## 20.1 Description, Location and History:

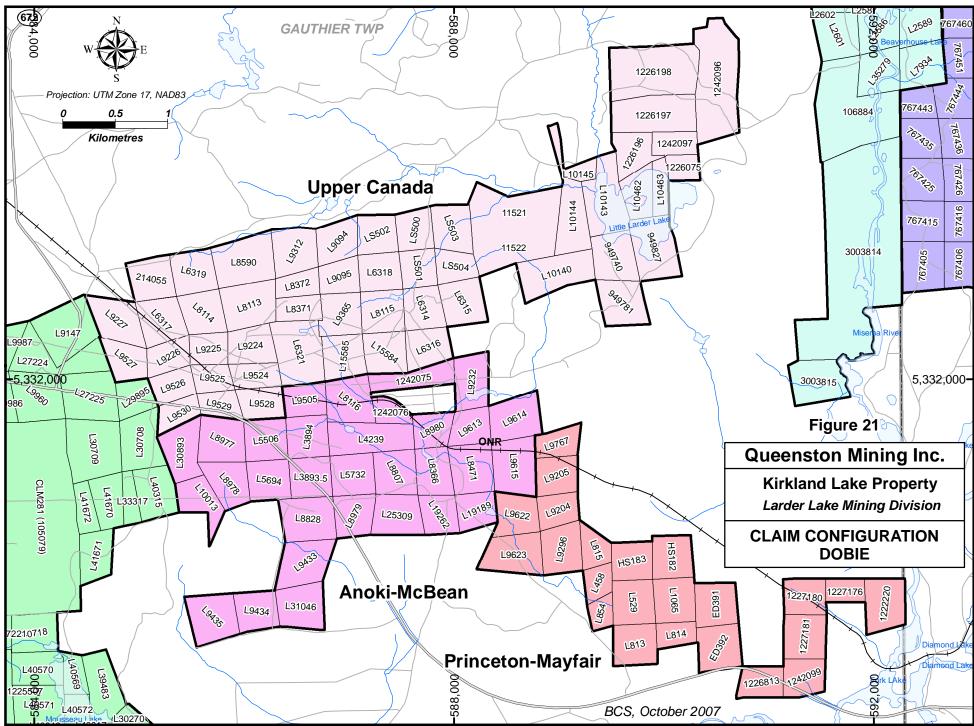
The Upper Canada property consists of 57 claim units in the central part of Gauthier Township (Fig. 21). Forty-three of the claims are patented, 34 for mining rights and surface rights, and, nine claims in the northwest corner of the property for mining rights only. The remaining 14 claim units are unpatented. They are due to expire in 2010 but sufficient assessment credits are available to hold the claims for a much longer period. Fifty-six of the claims are subject to the Newmont royalty. Claim specifics are outlined in Appendix A.

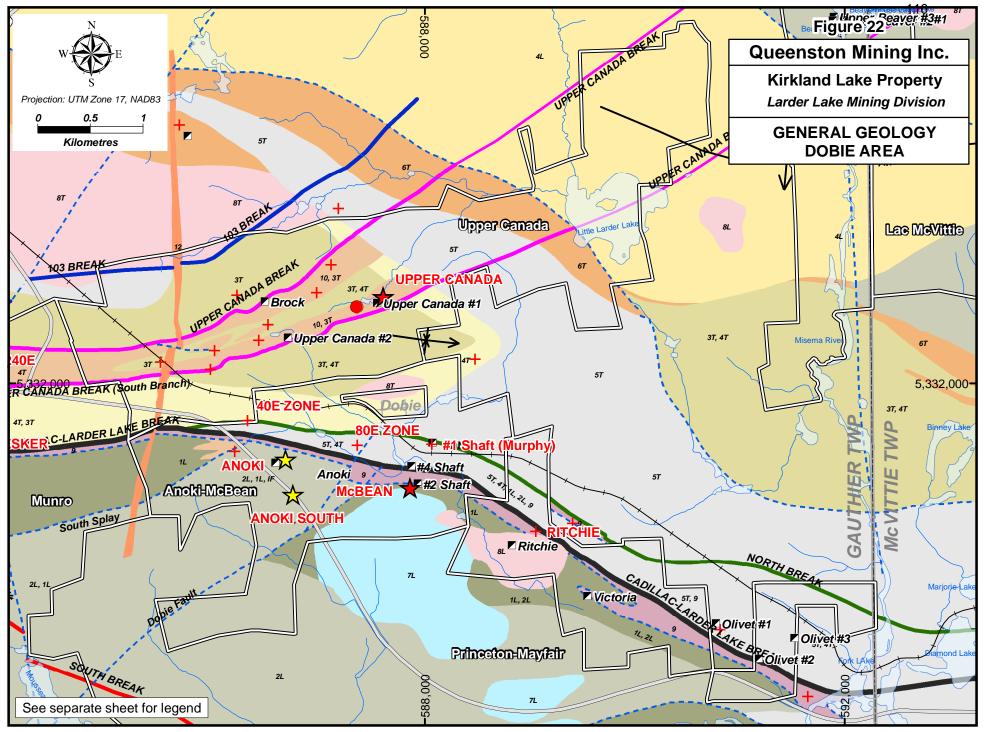
The property is contiguous with the Munro group (west) and the Anoki-McBean property (south). It includes an amalgamation of the historic Upper Canada Mines, Eastward Mines (west part) and Brock Mines (north) claims outlined in the Geology of Gauthier Township, by Thomson (1941).

A grid was last established over the southwest quarter of the property in 1999, as preparation for for magnetic surveys during the Queenston – Franco-Nevada joint venture. Grid lines trend northerly (346 degrees) and are spaced 200 ft (61 m) apart. The grid extends west and south from the Upper Canada #2 shaft to the Munro and Anoki-McBean grids.

Three shafts are located on the property (Fig.22). The #1 shaft is 3,700 ft (1,128 m) deep, with an internal winze from the 3625 to the 6325-ft level. The #2 shaft is 2,900 ft (884 m) west of the #1 shaft. It extends to a depth of 1,877 ft (572 m). Levels are established at 125-ft intervals, and, the two shafts are connected on the 375, 1000 and 1750-ft levels. Lovell (1979) indicates some 51,940 m of drifts, 13,536 m of crosscutts, and 15,949 m of raises. The shafts are capped.

The Brock shaft is roughly 400 m grid north of the #2 shaft, in the central part of the property. The Brock claims developed independently until 1946, when the property was acquired by Upper Canada Mines. The Brock shaft is 630 ft (192 m) deep with levels established at the 200, 325, 450 and 575-ft elevations. There is 968 m of lateral development on the 325 and 575-ft levels. The shaft is capped.





BCS, October 2007

The #1 shaft area and associated buildings are the site of the Queenston exploration office. The office is accessible via Highway 66 east from Kirkland Lake, thence east-northeast towards the community of Dobie. Dobie originated as a residential development for mine employees. Highway 66 and the nearby Ontario Northland railway cut the southwest part of the claim group. A paved road to Dobie also provides access to the southwest part of the property. Minesite roads and bush trails create further access into the area.

The western fringes of the Upper Canada property are covered by the Munro esker. In this area, the pine forest has been recently logged and is the process of regeneration. Eastward, there is some 10-15% outcrop exposure. Vegetation to the east is mixed, with poplar, birch, spruce, fir, jack pine, larch, mountain ash and scrub maple. Portions of the property are flooded from beaver activity, and, part of the low-lying ground eastward is the site of the Upper Canada tailings facility. Relief is in the order of 40 m.

The history of the property includes two inserts for work done by Brock Gold Mines and Eastward Mines on then adjacent claims. Those two properties now form part of the Upper Canada property after their acquisition in 1946. The history of the property is summarized as:

**1920-28**: East Main Gold Mines; prospecting and trenching; #1 shaft to 134 ft (41 m), M zone intersected on 125-ft level.

1929: Upper Canada Mines; acquire property.

**1936**: Upper Canada Mines; H zone discovered through surface drilling; #1 shaft deepened to 500 ft (152 m), lateral development on 125, 250, 375 and 500-ft levels.

**1938-39**: Upper Canada Mines; production commenced, mill on-line in 1939; #1 shaft to 1,000 ft (305 m).

**1938-41**: Brock Mines; 8 claims to north of Upper Canada; 17 surface drillholes (3,591 m); shaft to 630 ft (192 m), levels at 200, 325, 450 and 575 ft; 968 m lateral development on 325 and 575-ft levels; acquired by Upper Canada Mines in 1946.

1940-41: Upper Canada Mines; L zone discovered; #2 shaft started.

**1941**: Eastward Mines / Noranda Mines; 11 claims west; 12 drillholes; acquired by Upper Canada Mines in 1946.

**1941-72**: Upper Canada Mines; continuous production, mine closed in 1971, mill operated on Upper Beaver 'ore' until February, 1972; #1 shaft to 3,700 ft (1,128 m) with an internal winze from 3,625 to 6,325 ft (1,928 m); #2 shaft to 1,877 ft (572 m); levels at 125-ft intervals – lowest working level at 6,150 ft; 51,940 m drifts, 13,536 m crosscuts, 15,949 m raises, 10,305 underground drillholes (321,418 m).

**1977-87**: Queenston Gold Mines; magnetic, VLF-EM and IP surveys; prospecting, mapping, mechanical stripping and trenching, compilation; mill rehabilitated by Canico in 1983 as part of McBean joint venture.

**1988-90**: Inco Gold (option); geological, magnetic and IP surveys; database partly digitized; 78 surface drillholes (15,818 m).

**1990-96**: Queenston Mining; 7 surface drillholes (384 m).

**1996-2001**: Queenston – Franco-Nevada joint venture; linecutting and magnetic survey.

2002-06: Queenston Mining; no new exploration undertaken; shafts and other hazards capped.

The Upper Canada mine closed in 1971 due to a major capital infusion needed for expanding the operations, including a power changeover from 25 to 60 cycle. The mill complex continued to operate until February 1972 processing ore from the Upper Beaver property. Most of the management and mining team moved to the Macassa Mine.

Part of the Upper Canada property is subject to a closure plan related to the rehabilitation of the Upper Canada mill complex by the Canico (Inco) - Queenston joint venture (McBean property) in 1983. The mill processed both the McBean ore from the open pit, and, the bulk sample taken from the ramp on the Anoki property, in addition to a few custom milling contracts. In 1993, Inco Exploration and Technical Services Inc. finalized the closure plan with the Ministry of Northern Development and Mines. Implementation of the closure plan is ongoing.

Between 2001 and 2003 (during the Queenston – Franco-Nevada joint venture), the crushing, milling and refinery facilities in the #1 shaft area were decommissioned, along with demolition of selected surface structures, and, capping of mine hazards. Queenston's exploration office (former mine office and dry) and selected buildings at the #1 shaft location remain but the program was expanded to include the #2 shaft area with dismantling of the headframe, demolition of associated buildings, and capping of hazards in 2002-03. The crushing, milling and refinery facilities at the #1 shaft location are now demolished, and, all three shafts (#1, #2 and Brock) are capped. Surface areas have been contoured and seeded.

The Upper Canada mine was a major past producer in the Kirkland Lake camp. It produced 1.52 million oz of gold from 4,294,873 t grading 11.01 g/t between 1938 and 1972 (RPA, 1996).

## 20.2 Mineral Resources:

The Upper Canada property hosts a historic mineral resource. RPA (1996) reviewed several generations of resource estimates on the Upper Canada property. They concluded that a mix of prior calculations was most appropriate, wherein a Measured and Indicated resource of 1,899,973 t, grading 6.87 g/t were available from the C, L, and, M and Q zones. (Historically, individual zones were lettered at the Upper Canada mine). The historic resources were reported as Measured and Indicated, since they are defined by underground drillholes as well as underground development work.

RPA (1996) reviewed the calculations as:

(Note – historical use of resource and reserve as interchangeable in 1996, now considered as resource only.)

'A number of resource/reserve [resource] estimates have been carried out on the Upper Canada Property. Doane (1983) estimated the Measured and Indicated Resources to be 1,725,434 t at an average grade of 7.26 g/t. In 1986, T. J. Bottrill estimated the resources of the M and Q Zones at various cut-off grades; at the 2.74 g/t Au [gold] cut-off the reserves [resources] were estimated at 296,774 t at an average grade of 4.48 g/t. These reserves [resources] compare relatively well with the Q and M Zone reserves [resources] estimated by Doane in 1983. In 1990, Inco re-estimated the resources to be 629,748 t at an average grade of 13.37 g/t. Inco was of the opinion that about one third to one half of the tonnage contained in the 15 mineralized zones would be mineable.'

RPA (1996) discussed the various calculations as:

"RPA carried out certain checks of the above estimates and cautions that the 1990 Inco resources were not estimated using a certain cut-off grade and minimum width of mineralization. RPA concurs that the methodology utilized by Inco would be preferable to the block grading method, since the drillhole pattern is erratic. Nevertheless, RPA prefers the resource estimate of the Lower L Zone by Doane (1983) at this time, although the grade may actually be higher. RPA also notes Doane's caution that correlation of the mineralized intersections of the C Zone was difficult. RPA is of the opinion that the Upper Canada Mine resources ought to be estimated using a method which would allow for better definition of the mineralized trends, such as the contour method."

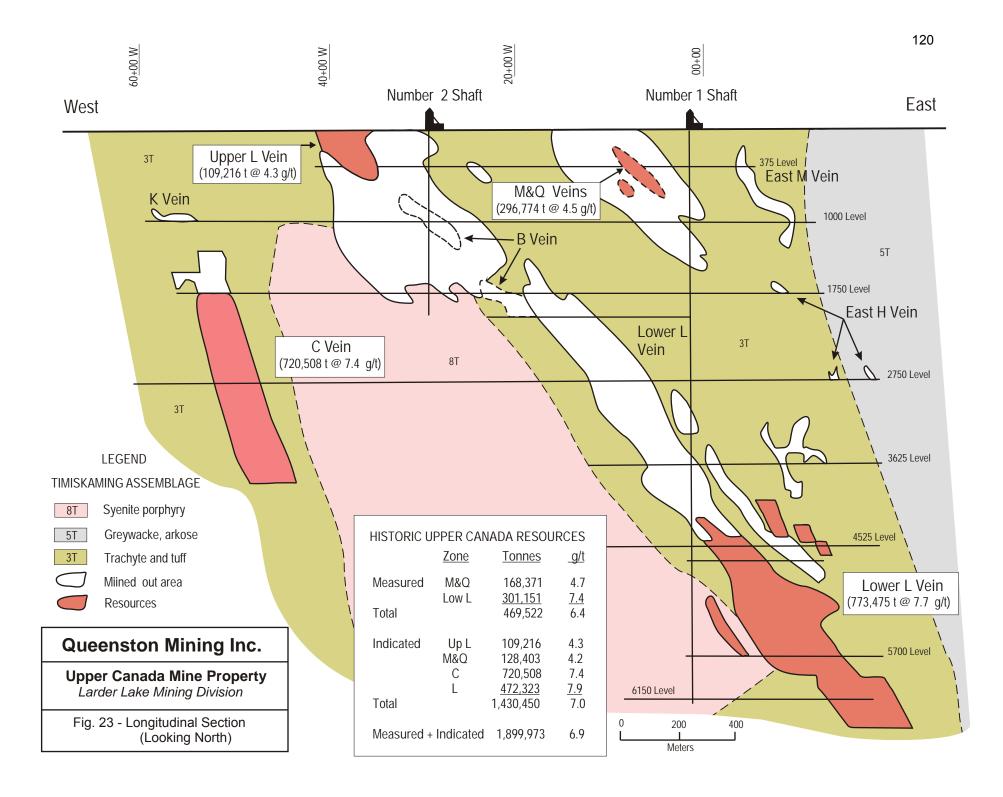
The final historic resource estimate of 1,899,973 t grading 6.87 g/t by RPA includes:

Zone	Source	Measured & Indicated Resources	Location
C Zone	Doane (1983)	720,508 t grading 7.37 g/t	1750 to 3650-ft level
Upper L Zone	Inco (1990)	109,216 t grading 4.29 g/t	Surface to 375-ft level
Lower L Zone	Doane (1983)	773,475 t grading 7.69 g/t	4000 to 6650 ft
M & Q	Bottrill (1986)	296,774 t grading 4.48 g/t	Surface to 625-ft level
Total	RPA (1996)	1,899,973 t grading 6.87 g/t	

 Table 11: Historic Mineral Resources, Upper Canada Property

A longitudinal section of the Upper Canada deposit (Fig.23) follows.

The RPA review does not comply to NI 43-101 and should not be relied upon as it has not been verified by a Qualified Person.



#### 20.3 Property Geology and Mineralization:

The Upper Canada property is primarily underlain by Timiskaming assemblage flows, tuffs and sediments with syntectonic dykes, sills and plugs of syenite (Fig. 22). The Cadillac-Larder Lake Break, which separates the Timiskaming and Tisdale assemblages in this area is further south on the Anoki-McBean claims. Upper Tisdale assemblage felsic tuffs and volcanic breccias, however, are noted in the far eastern limits of the property near Little Larder Lake (Fig. 22). This area is east and north of the north margin of the younger Timiskaming assemblage basin – contact disconformable and locally faulted. Formerly called the Gauthier Group, the felsic volcanics are designated Upper Tisdale assemblage from recent geochronology by Ayer et al (2001, 2002 and 2005).

In addition to syntectonic intrusions, both assemblages are cut by late stage Matachewan diabase dykes, and, on the 2750-ft level of the Upper Canada mine, a narrow (0.76 m), vertical, kimberlite dyke was located (Lovell, 1979). Tests for diamonds were negative.

The Upper Canada deposit sits within a 300 to 400 m thick deformation corridor framed by the regional Upper Canada Break (north), and, the South Branch of the Upper Canada Break (Fig. 22). The South Branch is interpreted to splay from the Cadillac-Larder Lake Break further west on the Munro property, near the Lebel / Gauthier township line. The deformation corridor strikes east-northeast and dips vertical to steeply north. It is characterized by a strong east-northeast fabric with several late mud gouges, and, variable ankerite, sericite, quartz, chlorite, and feldspar alteration, plus pyrite. The mineralized zones plunge 50 to 60 degrees east, unlike the Kirkland Lake Main Break and the 180 East Zone which plunge westerly.

The historic ore zones were typically within intensely sericitic, silicified and ankeritic, linear shear zones. They are most often restricted to narrow blue quartz veins or 'leads' in the thicker flow units, although flows, silicified tuffs and, to a lesser extent, syenite are common hosts to the ore. Mineralization consists of fine pyrite and native gold plus some accessory sphalerite, galena, chalcopyrite and molybdenite. In a few of the thinner flows, en-echelon, higher grade lenses are present within an envelope of lower grade mineralization. Past production is principally recorded on the H, M, Q, Upper B, Lower B, C, Upper L and Lower L zones, with only minor production (approximately 12,000 t) recorded on various other lenses.

The L vein is the largest, historic, ore-bearing zone, consisting of the Upper L at the #2 shaft (west) and the Lower L at the #1 shaft (east and down plunge). RPA (1996) indicates that the

Lower L is at the south contact of a mass of trachyte and related intrusives (Fig. 24). It extends from the 1500-ft level to below the deepest mine workings on the 6150-ft level, and, has an average plunge of 48 degrees (RPA, 1996). The Upper L, from surface to the 1750 level is hosted by siliceous tuff, trachyte tuff and agglomerate. The Upper and Lower L account for approximately 75% of the past gold production, and, 46% of the remaining historic mineral resources.

The two other zones with remaining resources are the C (38%) and M and Q (16%) zones. The C Zone, with an average grade of 7.37 g/t, is only partly mined between the 1750 and 3650 levels. It is characterized by dark bluish quartz veins and pyrite, in a siliceous tuff to trachyte host. The M and Q historic resource extends from surface to the 625 level and has a lower average grade of 4.48 g/t gold. Mineralization is up to 20 m wide in the M and Q Zone, in a trachyte to brecciated trachyte host.

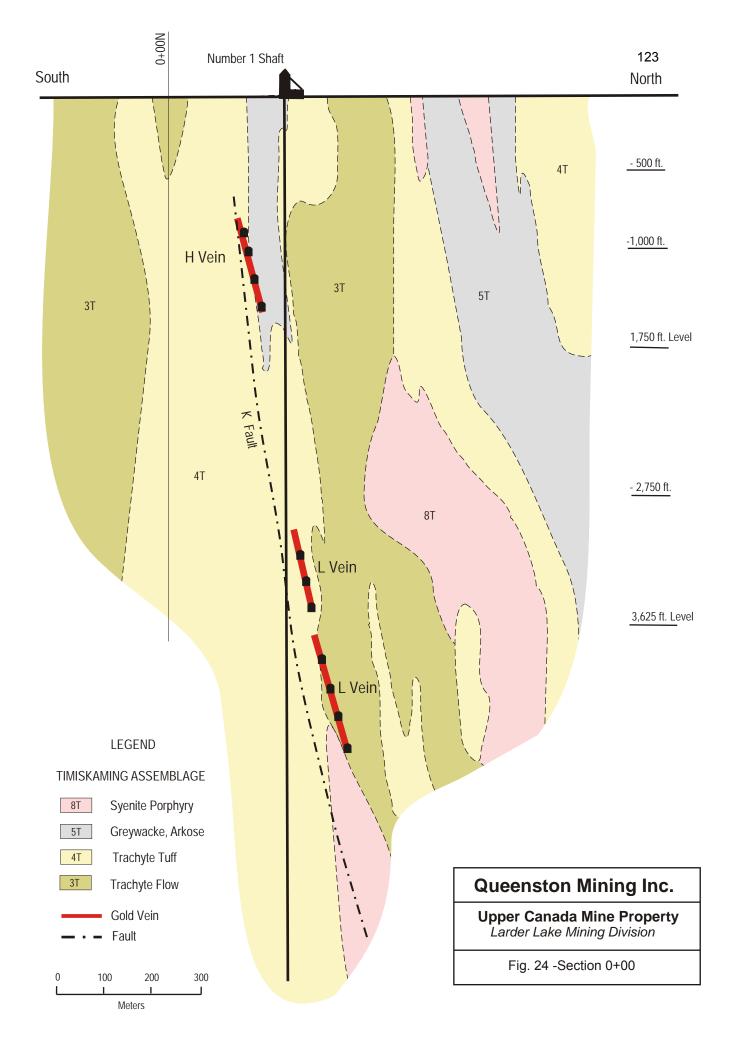
The B Zone is located 150 m north of the #2 shaft and hosts a series of zones mined between the 650 and 2000-ft levels in a sill-like body of syenite porphyry (RPA 1996). The zones are not accessed from the Brock shaft, which extended to 630 ft (192 m). The B Zone contains up to 1% sphalerite and galena in addition to chlorite, tourmaline and pyrite associated with the veining.

The regional 103 Break lies 600 to 700 m north of the Upper Canada Break. It also trends eastnortheasterly, but just skirts the northern boundary of the property (Fig. 22). Two drillholes by Inco Gold in 1989 sectioned the break environment encountering fractured and altered syenite but with low gold values in the target structure.

## 20.4 Exploration, Drilling and Recommendations:

No exploration has been undertaken on the property since 1999. The last field work consisted of linecutting and magnetic surveys over the southwest quarter of the property during the Queenston – Franco-Nevada joint venture. The magnetic survey was designed to establish a current database over the corridor of Timiskaming rocks, south and west of the Brock and #2 shaft areas. VLF-EM surveys were not added, due to the amount of interference from cultural effects such as hydro and telephone lines, railways, highways and underground workings. The geological fit with the magnetic signatures in the survey was not ideal, and, a program of check logging and compilation was recommended. The compilation was not completed, but should be continued.

Subsequent to the extensive exploration undertaken by Inco Gold, RPA (1996) highlighted a number of areas of exploration potential. Inco Gold completed geological, magnetic and induced



polarization surveys, partly digitized the Upper Canada database to the 2900-ft elevation, and, drilled 78 surface diamond drillholes (15,818 m) between 1988 and 1990. Drilling focused on the B, C and L zones, in addition to some sectional drilling, and, testing of selected geophysical anomalies. RPA (1996) indicated that good exploration possibilities existed on the west M & Q zones, the B Zone, the K Zone (in the far western segment of the property, 1 km west of #2 shaft) and, although at great depth (below 6,150 ft / 1875 m), the L Zone. RPA (1996) also noted some historic, high-grade intersections 550 m northwest of the #1 shaft that warranted follow up, along with a review of past geophysical results, and, exploration in the western and southwestern areas where limited data were available due to a lack of bedrock exposure along the edge of the Munro esker. The only follow-up to the RPA recommendations has been the linecutting and magnetic surveys in 1999, combined with the preliminary check logging and compilation noted above.

Currently, the very large database for the Upper Canada deposit is being digitized for 3D computer modelling. The digital data and a 3D model will greatly assist in the compilation effort, add to the understanding of the historic resources, and, potentially identify new exploration targets.

#### 21.0 ANOKI-McBEAN PROPERTY

#### 21.1 Description, Location and History:

The Anoki-McBean property consists of 31 claims in south central Gauthier Township (Fig. 21). Twenty-nine of the claims are patented for both mining rights and surface rights with the two remaining claims being unpatented. The two unpatented claims, L.1242075, and, L.1242076, are due to expire in July 2010, but there is sufficient assessment work 'banked' to hold the claims for a much longer period. The patented claims are subject to the NSR royalty to Inco, as part of the original 107 claims under joint venture between 1976 and 1996. All of the claims are also subject to the Newmont royalty. Claim specifics are detailed in Appendix A.

The Anoki-McBean property is contiguous with the Munro group (east), the Upper Canada property (north), and, the Princeton-Mayfair property (east).

The far southwestern part of the property is covered by grid lines trending due north, spaced 200 ft apart extending from the Munro Group (grid lines 288E to 304E). The main grid system relative to the Anoki and McBean deposits, however, is at 17.5 degrees. Grid lines, spaced 200 ft apart, extend from 20+00 E to 114+00 E with a tentative dividing line between the Anoki and the

McBean work placed circa 75+00 East, depending on the program continuity. The western (Anoki) part of the grid was last established in 2002-03, while grid lines in the eastern (McBean) segment have deteriorated since the various stages of cutting between 1996 and 2001. As on the Munro property, mineralized zones are sometimes identified by their grid location (as the 40 East and 80 East zones), where mineralization was first encountered (Fig. 25).

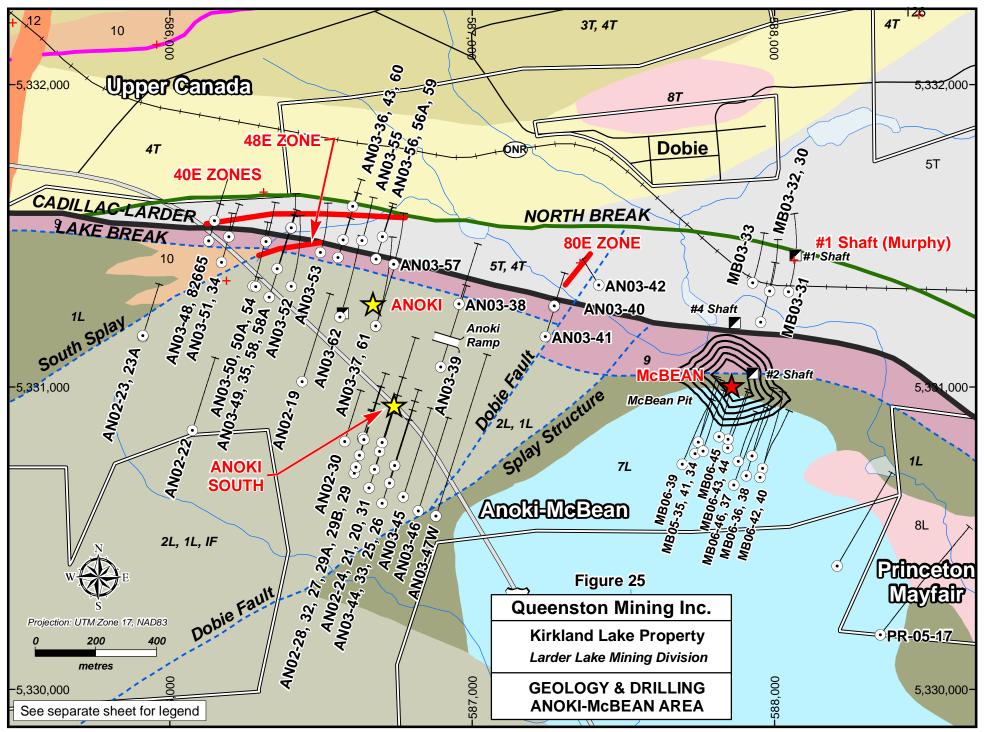
The division between the Anoki and the McBean sectors is both historical and geological, given that the two deposits developed somewhat independently in different parts of the stratigraphy. Underground developments are not linked, and, the moderate to large databases are coded separately for Anoki (west) and McBean (east) work.

The Anoki deposit contains an existing shaft to 754 ft (230 m), with levels at 350, 475, 600, and 735 ft, and, a ramp to a depth of 775 ft (236 m). The Anoki shaft (designated as #3) is capped, and, the ramp is barricaded.

The McBean deposit has three associated shafts, the #1 or Murphy shaft, the #2 shaft and the #4 shaft (Fig. 25). The Anoki shaft is designated as the #3 shaft since the Anoki property was acquired about the same time that the #4 shaft was being commissioned. The McBean #1 shaft is capped, and, the #2 and #4 shafts occur within the limits of the McBean open pit (now flooded). The McBean open pit is roughly 175 m by 200 m in surface area and extends to a depth of 266 ft (81 m) via seven, 38-ft benches. The #1 shaft is 630 ft (192 m) deep, with one level established at 600 ft; #2 shaft to 272 ft (83 m), with levels at 94, 125 and 250 ft, and; the #4 shaft extends to 722 ft (220 m) with levels at 125, 250, 400, 550, and 700 ft.

The property is readily accessible via Highway 66, which trends southeasterly through the west central part of the claim group. A private, all-weather road leads easterly from Highway 66 to the McBean open pit area in the east central part of the property. This road also diverges westward near the junction with Highway 66 to the Anoki ramp area and eventually to the Anoki shaft. A haulage road from the McBean open pit to the Upper Canada mill is now barricaded in several locations. The Ontario Northland railway also cuts across the northern third of the claim group. The claims are within the Corporation of the Township of Gauthier, and, the townsite of Dobie (population 130) is in the north part of the claim group.

The vast majority of the McBean area was logged in the early 1980's as preparation for the McBean open pit operated by Canadian Nickel Company Ltd (Canico). Today the vegetation is primarily immature jack pine in fine sandy soils. Aside from the remaining waste rock and



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overburden pile areas related to the pit operation, the natural topography is in the order of a few m.

Most of the Anoki segment has been more recently logged under a forest management agreement with Timmins Forest Products. For the most part, the remaining vegetation is minimal with birch and poplar in the higher ground and small spruce and alders in the more poorly drained areas. Topographic relief is in the order of 30 m with the highest ground in the outcrop area north of the Anoki shaft. There is a sharp change in relief of 15 to 20 m across the Cadillac-Larder Lake Break, just north of the Anoki shaft.

The property is readily accessible and can be operated on a year-round basis.

The history of the two sectors is summarized separately. The Anoki history includes:

**1916**: Elstone-Kirkland Mines; gold discovered, surface trenching and 5 drillholes (712 m). **1938-40**: Anoki Gold Mines formed; with additional funding from Bankfield Consolidated Gold Mines; shaft to 754 ft (230 m), levels at 350, 475, 600 and 735 ft; 702 m lateral development; 1,620 m underground drilling in 36 holes.

**1946-47**: Queenston Gold Mines; acquire Anoki; surface drilling plus extensive underground development and drilling 1950-51; mine closed in 1951.

**1976-86**: Canico option; mapping, geophysics (magnetics and IP), 38 surface drillholes (7,238 m).

**1987-88**: Canico option; underground exploration via ramp to 775 ft (236 m); 121 underground drillholes (12,022 m), from four levels; 607 linear m drifting; 24,494 t bulk sample taken, averaging 3.98 g/t.

**1988-89:** Inco Gold; feasibility studies.

**1996-2001**: Queenston - Franco-Nevada joint venture; 18 surface drillholes (11,580 m). **2002-06**: Queenston Mining; geophysical surveys (magnetics and IP); 44 drillholes (22,361 m) in 2002-03.

The history of the McBean section is summarized as:

**1928**: Murphy Mines; #1 shaft to 630 ft (192 m) with 610m lateral development on the 600-ft level; #2 shaft to 100 ft (30 m) with 45 m of lateral development on the 94-ft level; 10 surface drillholes. **1941**: Queenston Gold Mines; acquires Murphy claims; 4 surface drillholes (716m); #2 shaft to 272 ft (83 m), 228m of lateral development on 125 and 250-ft levels, 41 underground drillholes (846 m); bulk sample shipped to Upper Canada Mine – 956 t at 5.73 g/t.

**1946-47**: Queenston Gold Mines; #4 shaft to 267 ft (81 m), level established at 250 ft, and, 496 m lateral development at #2 shaft.

**1947-51**: Queenston Gold Mines; #4 shaft to 722 ft (220 m), levels at 125, 250, 400, 550, and 700 ft; extensive surface and underground drilling, and, lateral development; mine closed in 1951. **1976-83**: Canico option; surface drilling

**1984-86**: Canico joint venture with Queenston Gold Mines; open pit in #2 and #4 shaft areas. **1993**: Inco Exploration and Technical Services Inc.; development of closure plan.

1996-2001: Queenston - Franco-Nevada; 29 drillholes (22,698 m).

**2002-06**: Queenston Mining; 2 phases of drilling - 4 drillholes (1,389.8 m) in 2002-03, and, 13 drillholes (6,788 m) in 2005-06.

Subsequent to the operation of the McBean open pit as part of the Canico-Queenston joint venture, a closure plan was developed by Inco Gold and Technical Services Inc. In 1993, the plan was finalized with the Ontario Ministry of Northern Development and Mines.

Ore from the McBean open pit was processed at the Upper Canada mill complex on the Upper Canada property - #1 shaft location. Decommissioning and demolition data on the crusher, mill and refinery are discussed in the Upper Canada Property section. On the Anoki-McBean property, implementation of the closure plan includes capping of the #1 (Murphy) and #3 (Anoki) shafts, barricading of selected roads, decommissioning of hydro lines, and, contouring of the waste rock and overburden piles. The McBean pit is flooded, and, the portal to the Anoki ramp is fenced and barricaded. Active exploration from the overburden pile south of the McBean open pit precludes seeding at present.

Past production from the Anoki deposit consists of a 33,339 t, bulk sample mined by Canico in 1987-88. The sample was extracted from the four underground development levels and included 24,494 t grading 3.98 g/t, 6,532 t of low-grade material grading 1.82 g/t, and, 2,313 t of waste at an average grade of 0.45 g/t (RPA, 2004).

Past production at the McBean deposit includes a 956 t sample grading 5.73 g/t shipped by Queenston Gold Mines to the Upper Canada mill in 1941-42, and, production from the McBean open pit by Canico (as operator of the joint venture with Queenston Gold Mines), between 1983 and 1987. The open pit recovered 48,513 oz of gold from 505,866 t, grading 2.98 g/t (RPA, 1996).

# 21.2 Mineral Resources:

Both the Anoki and McBean deposits host mineral resources.

Mineral resources on the Anoki segment include the Anoki deposit and the Anoki South Zone (discovered in 2002). In 2004, Roscoe Postle Associates Inc (RPA) upgraded the Anoki resources to NI 43-101 standards. RPA used Gemcom software and a block modelling method with internal checks via the contour method on the Anoki deposit, and, a contour method for the Anoki South Zone. Other parameters included a minimum 5-ft (1.52 m) horizontal width for the Anoki deposit and 5.5 ft (1.68 m) for the Anoki South Zone; high-grade values cut to 34.29 g/t (1 oz/ton); gold price of \$400 US; 94% recovery, and; total production costs of \$95/t (Canadian dollars). RPA interpreted the higher grade intersections into seven mineralized lenses at the

Anoki deposit, based primarily on gold assays with 'a threshold of approximately 3.5 g/t'. Two lenses showed good continuity and hosted 90% of the mineralization. RPA subsequently divided the resources into Measured, Indicated and Inferred categories, based on underground verification by sampling, continuity and drillhole spacings. Calculations were made at cut-off grades of 5, 3.5 and 2.5 g/t.

RPA recommended using the 3.5 g/t cut-off grade, wherein the Anoki deposit was estimated to contain 522,300 t of measured and indicated resources grading 5.70 g/t, and, 35,800 t of inferred resources grading 5.69 g/t, while the Anoki South Zone was estimated to contain 106,000 t of inferred resources at an average grade of 6.48 g/t. In table format, the results include:

Zone	Measured and Indicated Resources	Inferred Resources
Anoki	522,300 t grading 5.70 g/t	35,800 t grading 5.69 g/t
Anoki South		106,000 t grading 6.48 g/t
Total	522,300 t grading 5.70 g/t	141,800 t grading 6.28 g/t

Table 12: Current Mineral Resources, Anoki Deposit and Anoki South Zone

An estimate of the resources at a 2.5 g/t cutoff for the Anoki deposit, results in 706,600 t of measured and indicated resources at 5.01 g/t, plus 40,200 t of inferred resources at 4.60 g/t. A full copy of the RPA report is available through <u>www.sedar.com</u>, Queenston Mining, Technical Report, 1627 Kb, filed May 14, 2004. In the 2004 report, RPA named the Anoki deposit the Anoki Main Zone, a designation not continued in this report.

The McBean resources are historic and are not compliant to NI 43-101 standards as they have not been verified by a Qualified Person. They are related to calculations by Queenston Gold Mines and Canico dating to 1985, and, Queenston Mining, dating to 1997, during the Queenston – Franco Nevada joint venture. RPA (1996) reviewed the Canico vintage resources, estimated to contain

: 835,518 t of Measured and Indicated resources, grading 5.14 g/t, and : 723,934 t of Inferred resources, grading 4.57 g/t.

The 1985 calculation was a re-estimation of the remaining Measured and Indicated resources (i.e. not including resources allocated to the open pit operation). A cutoff grade of 0.10 oz/ton (3.43 g/t) was used although internal mineralization to 0.05 oz/ton (1.71 g/t) was included such that the cutoff was recorded as 0.05 oz/ton (1.71 g/t).

The McBean resources occur in three, steeply dipping, easterly plunging zones of mineralization – the Q1, Q2 and Q3 zones. All of the zones have Measured, Indicated and Inferred elements dictated by drillhole spacing and amount of underground confirmation (from lateral development on the 125, 250, 400, 550 and 700-ft levels at the #4 shaft).

The upper portion of the Q1 zone (surface to 81 m) was mined by Canico and Queenston via open pit between 1983 and 1987. Total production amounted to 48,513 oz gold from 505,866 t grading 2.98 g/t.

RPA (1996) noted that:

'The Q1 zone has been well explored from surface to below the 700-ft level by the Queenston underground work and by Inco drilling. The Q1 zone attains widths up to 100 ft (30 m) above the 250-ft level (the open pit environment).'

'The Q2 zone has been explored on the 250, 400 and 700-ft levels, and, by surface and underground drilling. The Q2 zone extends from just below surface, where it is about 400 ft (122 m) west of Q1, to below the 700-ft level, where it appears to merge with the Q1 zone.'

'The Q3 zone, located about 1000 ft (305 m) west of the Q1 zone, has been explored only on the 700-ft level, and, by underground and surface drillholes. Although not as well explored as the other zones, the Q3 zone does not appear to extend to surface, and is generally of lower grade.'

'The Queenston deposit is open at depth and further drilling is required to determine its potential. Intersections such as 0.198 oz/ton (6.79 g/t) over an estimated true width of 62.4 ft (19.0 m) in hole 57347 are considered to be significant and require further follow up.'

In 1996, the McBean historic resource extended to a depth of 1000 ft (305 m) in the Q1, Q2 and Q3 zones.

The first priority of the Queenston – Franco-Nevada joint venture was to test the McBean mineralization at depth. The Q1 zone was the main target of the first 28 drillholes during 1996-97, leading to a calculation of an inferred resource of 1,111,303 t grading 7.51 g/t. The resource is considered historic and is not compliant to NI 43-101. It cannot be relied upon as it has not been verified by a Qualified Person.

The 1997 calculation was performed on three zones – the C Zone near the hanging wall of a green carbonate horizon, the C' Zone near the footwall of the green carbonate, and, the FW (or footwall) Zone in a green carbonate horizon near the footwall of the deformation zone. Section 103 East was used for the initial interpretation and correlation of the mineralized zones since it had the best density of information. An apparent dip of 65 degrees south on section 103 East was

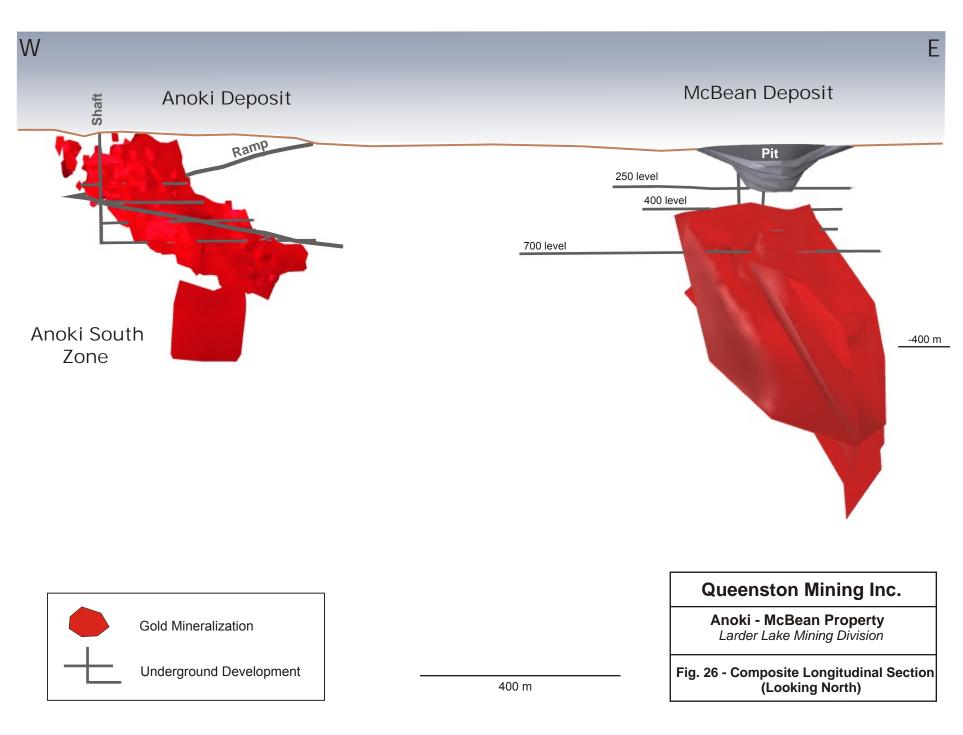
allocated to the other sections, and, true widths were estimated by multiplying core length intervals by 0.82 (the sin of the appropriate core angle for the drillholes at -60 degrees).

The resource calculation employed a cross-section method where resource blocks were extended midway between holes in the section dimension to establish height with the true thickness. The strike dimension of the block was determined from pierce points on the vertical longitudinal section. Blocks on the margins of zones were extended a maximum of 200 ft (61 m) strike length into areas without drillhole data – three such blocks exist on the C zone. Other parameters used included a minimum true width of 5 ft (1.52 m); block cutoff grade of 0.10 oz/ton (3.43 g/t); high assays cut to 1 oz (34.3 gms), and; tonnage factor 11.5 cubic ft/ton. As noted in the historic, 1985 calculation, the block cutoff grade (3.43 g/t) included lower grade material to 0.05 oz/ton (1.71 g/t) which generally appeared to limit most of the mineralized sections. Calculations only included the 1996-97 diamond drilling.

The reference to 6.79 g/t over an estimated true thickness of 19.0 m cited by RPA above, was not included in the calculation since it was well above the 300 m elevation. Other historic data were not included since the historic drillholes had neither been revised nor checked for location and zones at the time of the calculation. One of the higher grade holes (MB-96-04) of the 1996-97 program at a cut grade of 11.31 g/t over 1.8 m true thickness, however, appears to correlate with underground drillhole 532 hosting 13.54 g/t over 2.1 m true thickness. Less clear is the relationship between 1996 drillhole MB-96-8B with 3.29 g/t over 8.1 m true width, including 9.94 g/t over 3.2 m (the intersection used in the calculation), versus nearby historic drillholes 57350 (Canico) at 2.98 g/t over 15.5 m true width, including 4.56 g/t over 3.7 m, and, underground drillhole 331 with 8.33 g/t over 4.1 m true width. Generally, variations between old and more recent data are not extreme.

The calculation suffers from the coarse spacing of the drillholes, which is in the order of 100-120 m, and, the lack of projection of the zones into the third dimension, horizontal planes / level plans. The recent Phase II drilling program (see Exploration, Drilling and Recommendations section), was designed to begin upgrading of the historic McBean resource to NI 43-101 standards and assist in the geological interpretation of the Cadillac-Larder Lake Break deformation corridor.

A composite longitudinal of the Anoki-McBean property (Fig. 26) shows the relative positions of the Anoki, Anoki South and McBean mineralization. The longitudinal is along the strike of the Cadillac-Larder Lake Break. Mineralization outlines on the Anoki Deposit and the Anoki South Zone are up to date, while the outlines on the McBean deposit reflect the current state of 3D computer work – historic data above the 400-ft level having yet to be integrated into the dataset.



In summary, the McBean historic resource includes:

Source / Zone	Measured & Indicated Resources	Inferred Resources
RPA (1996)/ Q1, Q2 & Q3	835,518 t grading 5.14 g/t	723,934 t grading 4.57 g/t
Queenston (1997) / at depth		1,111,303 t grading 7.51 g/t
Total	835,518 t grading 5.14 g/t	1,835,237 t grading 6.35 g/t

The historic resources are not compliant to NI 43-101 and have not been verified by a Qualified Person.

# 21.3 Property Geology and Mineralization:

The dominant geological feature on the Anoki-McBean property is the Cadillac-Larder Lake Break (Fig. 22). In this area, the break strikes east-southeasterly subparallel to the base line at 107 degrees and dips south. It cues along the ultramafic members of the Tisdale assemblage, separating komatiitic to tholeiitic sequences in the hanging wall (south) from Timiskaming assemblage alkalic volcanics and sediments to the north. Slip movement direction of the break is suggested to be dextral, south-side-up, along the plunge (40 to 60 degrees east) of the stretching lineation (Ispolatov, 2003). The Tisdale package is highly sheared and deformed, and, varies from 30 to 120 m thick. Timiskaming assemblage rocks are also highly deformed over 300 to 400 m footwall to the break.

The regional Upper Canada and 103 breaks are north of the Anoki-McBean property boundaries (Fig. 22). The South Break is south of the property limits. The North Break (intermittent splay) is again present. It splays from the Cadillac-Larder Lake Break around the western margin of the property where the Cadillac-Larder Lake Break exhibits a subtle change in strike from east-northeast and east on the Munro property to east-southeast on the Anoki-McBean lands. The North Break is interpreted to track north of the 40 East Zone, gradually becoming parallel to the Cadillac-Larder Lake Break about 300 m north of the McBean open pit in the #1 or Murphy shaft area.

The Anoki deposit and Anoki South Zone are hanging wall to the Cadillac-Larder Lake Break, while the McBean deposit is located totally within the deformation corridor. All of the deposits are in Tisdale assemblage rocks. In the Anoki environment, effectively no gold values are encountered in the Cadillac-Larder Lake Break. The break is also thinner on the Anoki portion (50 to 100 m), versus a much thicker, 100 to 150 m package at the McBean. At the McBean location, the hanging-wall, Tisdale assemblage is absent due to the presence of a 1-km diameter, gabbro / diorite intrusive complex (Fig. 22).

## 21.3.1 Anoki environment:

The Tisdale assemblage, consisting of mafic to ultramafic volcanics with units of chert and interflow sediments hosts the Anoki deposit and the Anoki South Zone (Fig. 27).

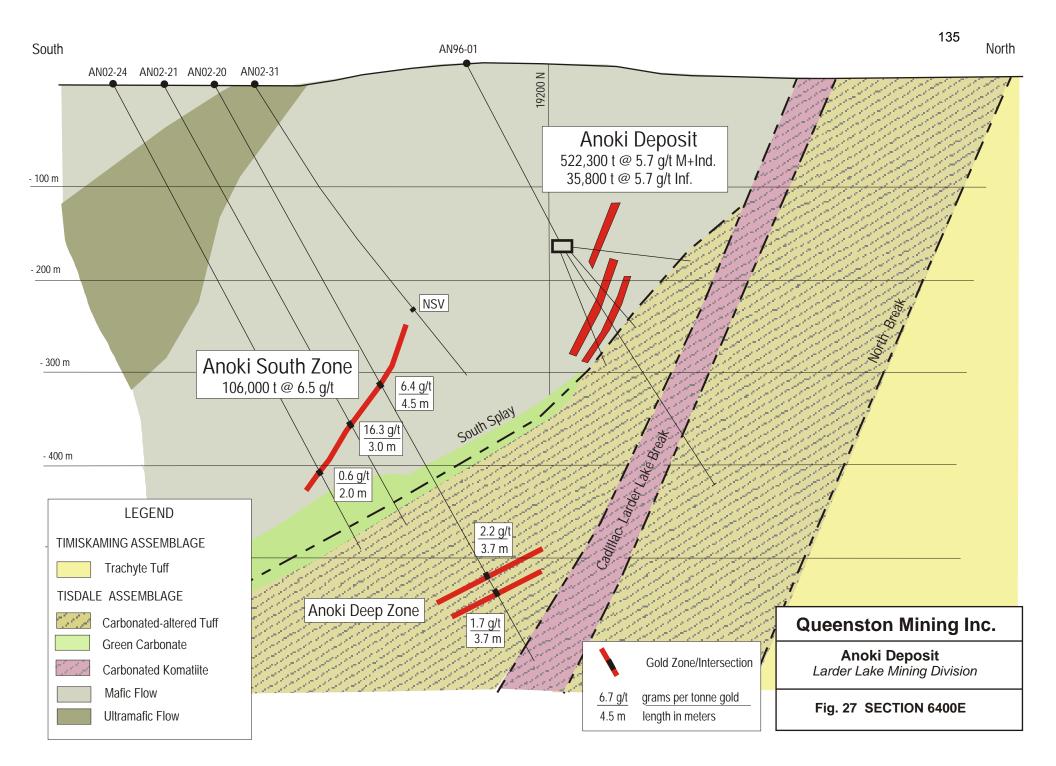
The Anoki deposit occurs within a 50 to 100 m thick package of coarse grained basaltic flows. Two, roughly equal sized coarse flow sequences are present, both of which terminate along packages of cherty, graphitic and tuffaceous rocks plus or minus felsic intrusives at their north contacts. The southernmost sequence (RPA lens #1 and #2), contains some intercalated ultramafic units (RPA, 2004). The northern sequence hosts the historic footwall zones (RPA lens #7 via RPA, 2004). The coarse flow sequences are in contact with finer grained basaltic flows and interflow sediments to the south, and, amygdaloidal to vesicular and variolitic basalt flows northward. The variolitic flows continue northward to the sheared ultramafic rocks at the start of the Cadillac-Larder Lake Break.

Both the historic, southern (RPA lens #1 and #2) and footwall (RPA #7) zones are characterized by altered and mineralized corridors within fractured to brecciated coarse flows. The mineralized corridors tend to cue along finer grained, brecciated to quench textured flow margins and rarely extend into the cherty and tuffaceous members. The coarse grained basalts are magnetic, bleached, fractured and silicified and are well altered with ankerite, sericite, albite and chlorite plus or minus local fuchsite / paragonite. Pyrite mineralization reaches up to 10% on a local scale as fine to medium grained disseminated material as well as coarser blebs to patches. Ankerite and quartz-ankerite veining are poorly developed.

The feasibility study by Inco Gold Management Inc (1990) indicates that:

'the mineralization is a hydrothermal replacement (of the coarse flows), comprised of carbonate, albite, rutile, pyrite, gold, minor quartz, hematite and magnetite. The location of the mineralization is controlled by south-dipping fractures formed near the upper contact(s), parallel to a northeast-plunging fold axis. The grade of an area improves with increased fracturing'.

In the upper levels, Anoki deposit dips north; at depth, it dips south. Both the southern and footwall zones, particularly the footwall zone, exhibit flatter dips to the south approaching a splay structure - the South Splay.



The South Splay appears to offset the Anoki mineralization and define a flat (20 to 30 degrees) easterly plunge to the Anoki deposit. It is characterized by strong gouge, ultramafic rocks and carbonate zones in the immediate vicinity of the Anoki deposit and at its start from the Cadillac-Larder Lake Break. The structure is represented by a 7 to 30 m corridor of sericitic and fuchsitic carbonate rocks at the interface between basalts and komatiites of the Tisdale assemblage, and, highly altered, deformed tuffs and volcaniclastics of probable Timiskaming affinity. As the South Splay diverges from the Cadillac-Larder Lake Break (dip of 60 to 70 degrees south), it flattens to a dip of 10 to 30 degrees south within 250 m and defines a wedge of highly altered volcaniclastics footwall to the South Splay and hanging wall to the Cadillac-Larder Lake Break (Fig. 27). Southward, as the wedge enlarges, more typical basalts and komatiites of the Tisdale assemblage are encountered within the wedge – the relationship between the two sequences is unclear due to the coarse drill spacing and faulting.

Within the altered and deformed volcaniclastics of probable Timiskaming affinity, there are a number of intersections that are anomalous in gold content. At present, neither grade nor continuity is sufficiently established to develop a resource. The mineralized zones are characterized by accessory veining, ankerite alteration, silicification and pyrite mineralization, with or without fuchsite and sericite alteration, and, orangish staining. They are identified as Anoki Deep style mineralization (Fig. 27). The Anoki Deep discovery drillhole (AN-97-03), hosts the highest grade mineralization to date with 24.0 g/t gold over 4.0 m (8.2 g/t using a 34.3 g/t cut) at a vertical depth of 381 m. A second zone in drillhole AN-97-03 assays 1.4 g/t over 16.9 m, including an interval of 3.8 g/t over 1.9 m at a vertical depth of 412 m.

The Anoki South Zone, discovered in 2002, is some 300 meters south of the Anoki deposit. It consists of altered and mineralized cherts, graphitic sediments and thin basaltic flows north of a thick sequence (200 m) of fine to medium grained gabbroic textured basalts. The rocks are overturned, with dips of 50 to 80 degrees south and top directions to the north. Two interflow packages are present, the lower package of which is more strongly altered and mineralized. The Anoki South Zone is also hanging wall to the South Splay structure.

The Anoki South mineralization is characterized by elevated sulphides, locally to 20% pyrite plus or minus pyrrhotite, chalcopyrite and sphalerite. The interflow host is ankeritic, silicified, bleached and variably contorted. In addition to quartz-ankerite veining, the Anoki South Zone is weakly refractured with calcite and is locally cut by smoky quartz veins with visible gold.

Unlike the McBean sector to the east, to date, no mineralized zones are developed within the Cadillac-Larder Lake Break.

North of the Cadillac-Larder Lake Break, Timiskaming assemblage rocks are encountered on both the Anoki and McBean sectors. On the Anoki property, the assemblage is represented by a 150 to 300 m package of variably altered volcaniclastics, tuffs and sediments, followed by a sequence of dark, amphibolitic and magnetic mafic tuffs that have a trachytic (alkalic) affinity. The North Break essentially follows the volcaniclastic / mafic tuff contact in this area, and, the 40 East zones occur within the volcaniclastic portion of the Timiskaming assemblage (Fig. 25).

The volcaniclastics that host the 40 East mineralization, consist of granular to gritty textured units and much finer grained, silty to ashy rocks. Both types of units can contain fragments but the silty to ashy members are the most common hosts of coarse, polygenetic fragments to 10 cms in size. The sequence is medium to dark grey green in colour, poorly veined and sparsely mineralized except in the 40 East and 40 East, North corridors. These two corridors are characterized by accessory sericite and ankerite alteration, hematite +/- magnetite, albite, veining, pyrite +/- chalcopyrite, rare visible gold, and reddish to orangish staining.

The 40 East Zone was discovered by Canico in 1990, via drillhole 82665 which encountered 0.9 g/t gold over 22.1 m. It is a broad, low-grade feature with very limited continuity, while the 40 East, North zone is more focussed with veining and mineralization.

The 40 East, North Zone was discovered during the 2002-2003 program through follow-up drilling of the results in Canico drillhole 82665. It is traced some 2,000 ft (610 m) from section line 40+00 East to section 60+00 East. The 40 East, North Zone is at a slight angle to the stratigraphy, transgressing from the lower part of the volcaniclastic package on section 40+00 East to the north contact with mafic tuffs circa line 60+00 East – a shift of 50 to 60 m north along a strike length of 600 m. The best assay interval on the 40 East, North Zone is 16.8 g/t over 2.6 m, including 52.1 g/t over 0.8 m in drillhole AN-03-35.

Neither the 40 East nor the 40 East, North Zone intersections are of sufficient grade or continuity to warrant a resource calculation.

In addition to the primary zones of mineralization (the Anoki Main, Anoki South, Anoki Deep and 40 East zones), anomalous gold values are found throughout the system. Most of the anomalous gold values are associated with the Cadillac-Larder Lake Break and/or the South Splay, and, can occur in either Tisdale or Timiskaming assemblage rocks.

One interesting zone of mineralization, near-surface and hanging wall to the Cadillac-Larder Lake Break was first encountered in drillhole AN-03-35 on section 48+00 East (Fig. 25). Tentatively identified as the 48 East Zone, the mineralization occurs around the junction of the Cadillac-Larder Lake Break and the South Splay. The sequence proceeds from Tisdale assemblage basalts to carbonate rocks, carbonated volcaniclastics, and, a second narrow carb interval at the contact with sheared and deformed ultramafics in the Cadillac-Larder Lake Break. The Tisdale assemblage basalts are fine grained and vesicular. Approaching the fuchsitic carbonate rocks, vesicles become highly bleached and altered, coalesce, and, the basaltic protolith is gradually obliterated to a sericitic and mineralized carbonate (ankerite) rock. The contact between the sericitic carbonate rocks and the fuchsitic carbonate is subtle but, beneath the 10 to 15 m fuchsitic carbonate interval (South Splay), the protolith consists of carbonated volcaniclastics of the Anoki Deep style. The carbonated volcaniclastics are followed by a thin unit of drab green to fuchsitic carbonate hanging wall to the ultramafics of the Cadillac-Larder Lake Break.

The 48 East mineralization is characterized by strong ankerite and sericite alteration +/- fuchsite, up to 2-3% disseminated to streaky and fracture-controlled pyrite, and, 5-15% irregular, quartz-ankerite veining. The altered basaltic and volcaniclastic parts of the system tend to be better mineralized than the fuchsitic carbonate rocks. The orientation of the mineralization is less clear, given that the zone is around the junction of the South Splay and the Cadillac-Larder Lake Break, and, there is essentially no depth information. Thus discrimination of the true widths of the mineralized sections is hampered by a lack of geological information. Assays in discovery drillhole AN-03-35 are typical with 0.5 g/t gold over 24.5 m, including 1.2 g/t over 3.7 m, while the best assays to date are in drillhole AN-03-52 (61 m east) with 6.0 g/t over 1.0 m. The 48 East Zone is not of sufficient grade to warrant a resource calculation.

One further section of gold mineralization was also tested by the 2002-2003 drill program – a northeast-striking, green carbonate zone in the volcaniclastics north of the Cadillac-Larder Lake Break, on line 80+00 East, and, referred to as the 80 East Zone (Fig. 25). This area was previously tested via five, shallow drillholes by Queenston Gold Mines in 1944 (drillholes Q18 to Q22 inclusive). The carbonate zone is exposed on surface with a 40-degree strike and uncertain dip. The best historic assay was 41.83 g/t over 0.46 m in drillhole Q20, which expanded to 6.29 g/t over 3.63 m uncut (5.34 g/t over 3.63 m – high values cut to 1 oz). Two drillholes, AN-03-40 and AN-03-41, tested the Cadillac-Larder Lake Break near the projected intersection with the carbonate zone. Both of these holes encountered broad zones of low-grade mineralization in the Cadillac-Larder Lake Break and scattered gold values in the footwall volcaniclastics, (the low-grade zone in drillhole AN-03-40 assayed 0.2 g/t over 56.5 m, with a best interval of 3.1 g/t over

0.7 m). One further hole (AN-03-42) was drilled perpendicular to the carb zone in the volcaniclastics. The present drilling did not enhance the prospect.

In general, mineralization models advanced during the program are locally relevant. The Anoki deposit zones have similarities to the basaltic 'flow ore' at the Kerr Addison mine, while the alteration, veining and mineralization in the volcaniclastic rocks are more analogous to the break style of mineralization typical to the Kirkland Lake camp.

#### 21.3.2 McBean environment:

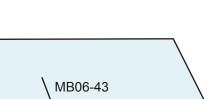
Similar to the Anoki property, the dominant feature on the McBean claims is the Cadillac-Larder Lake Break. The break / deformation zone hosts the McBean deposit (Fig. 25).

In this area, the deformation zone is 100 to 150 m thick, dips 65 to 75 degrees south, and is localized within ultramafic to mafic volcanics of the Tisdale assemblage (Fig. 28). Variably altered and deformed ultramafics are the primary host. Tisdale assemblage rocks continue southward from the deformation zone although the hanging-wall system is dominated by a 1-km diameter gabbro-diorite complex (Fig. 28).

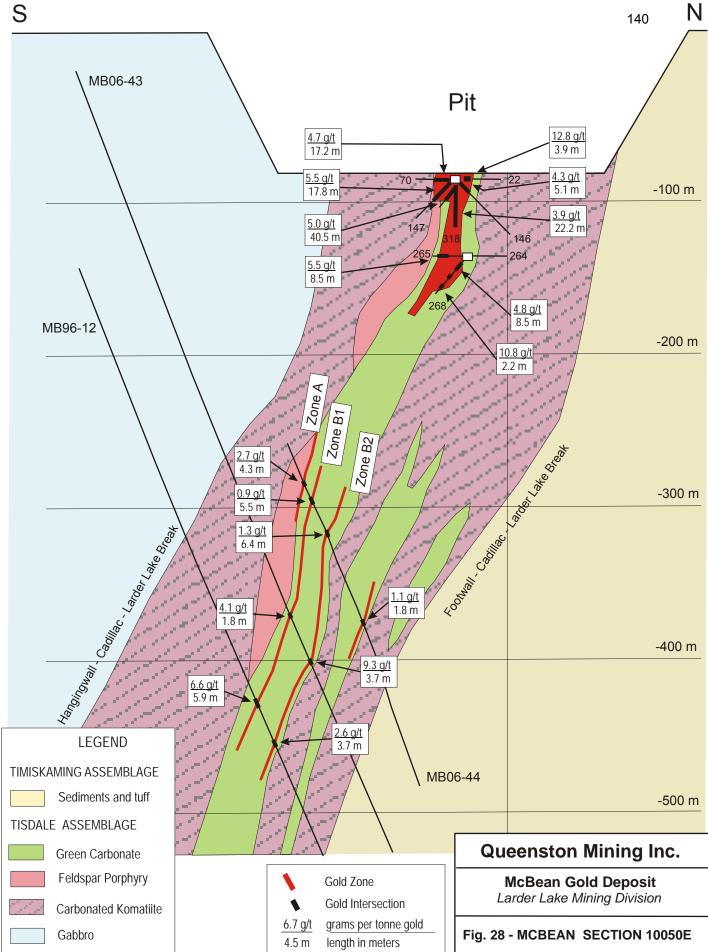
Footwall (north) of the Cadillac-Larder Lake Break is a 300-m package of variably sheared and altered tuffs, volcaniclastics and mafic to ultramafic units (the North Break environment) before more typical Timiskaming sediments are encountered. At the #1 or Murphy shaft, the North Break is characterized by strong shearing, bleaching, ankerite alteration and veining. The North Break environment reacts much like the North Break lozenge of altered and deformed rocks on the Pawnee lands, and, is in a similar physical position to the 40 East Zone on the Anoki property some 1.2 to 1.8 kms west (Fig. 25).

In 2003, four holes (MB-03-30 to MB-03-33 inclusive) tested the North Break structure, encountering a 20 to 30 m, strongly bleached and altered corridor dipping 65 to 75 degrees south. The drilling returned a best assay of 9.6 g/t over 2.5 m, including 32.0 g/t 0.7 m from drillhole MB-03-30. The higher grade interval contained traces of visible gold associated with grey to smoky quartz-ankerite veining.

The Cadillac-Larder Lake Break / deformation zone is variably sheared to gouged, altered, and, cut by mafic to felsic and alkalic dykes. Mineralized zones are intimately associated with the felsic to alkalic, syntectonic intrusives and related carbonate to fuchsitic carbonate alteration. The carbonate alteration is slightly discordant in both plan and section to the overall geometry of the



Ν 140



deformation zone. Currently, some five mineralized zones are noted within the system – lettered A to E, plus a hanging wall feature to Zone A, designated as H (Fig. 28). Zones often have branching to splay elements as the C, C1, C2 and CM parts of the C Zone corridor. The C Zone is in a central position to the deformation package, while the E Zone is located in the footwall (former FW Zone). The A, AE and H zones are in the hanging wall environment. They are most commonly associated with a syenite to felsite intrusive. The intervening ultramafics between the carbonate zones are generally talcose and sheared.

Leblanc and Ploeger (2007) describe the alteration and mineralization within the deformation corridor:

"All of the mineralized zones are located within the deformation corridor, hosted by variably altered ultramafic units, probably komatiitic flows that are cut by a series of boudinaged felsitic intrusives. The weakest stages of alteration in the ultramafics range from talc chlorite to amphibolite, the latter which forms an amphibole- calcite (chlorite- biotite?) mix that is slightly pinkish toned and has been termed "incipient" alteration in the logs. As the degree of alteration increases, the host becomes more strongly veined with streams of ankerite veinlets along foliation planes, and then by pervasive carbonatization of the matrix. In the strongest stage, parts of the matrix become pervaded with fuchsite forming the typical "green carbonate" horizons found along the Larder Lake Break [Cadillac-Larder Lake Break]. All of the rocks in this corridor are weakly to strongly deformed through shearing and folding, the entire unit dipping south at approximately 65 degrees."

"The upper third of the deformation corridor is dominated by talcose and incipient altered ultramafics, tuffs and gabbro cut by a series of felsitic intrusives of varying compositions and widths, forming a hanging wall zone that ranges from 80- 220' [24-67 m] in thickness. Individual dikes are described as syenite or felsite, depending on the grain size, and range from a few inches to 120 feet [37 m] in thickness. Narrow felsic dikes (possibly altered felsitic tuffs), which are also found through the remainder of the ultramafic package, are variably altered and mineralized depending on the intensity of alteration of the ultramafic host."

[This upper third of the deformation corridor hosts the H, AE and A Zones.]

"The lower portion of the alteration corridor, which ranges from 300-400 feet [91-122 m] in width, is composed mainly of variably altered ultramafic lithologies, the most significant of which are the green carbonate altered horizons. There were four green carbonate zones identified, which, from south to north, were designated as B, C, D and E, beginning at the base of felsitic package."

"Four dominant parallel fault structures were identified cutting the felsitic and green carbonate packages. They slice through at shallow angles to the strike as a series of thin thrusts with possible vertical offsets of 400 feet [122 m] or so as they migrate from footwall to hanging wall going from west to east."

"A total of 13 different mineralized zones, labeled H, A, AE, B, B1, B2, C, C2, CM, C1, D, D1, & E (south to north), were identified within the felsitic and green carbonate packages. Of these, the H/ A/ AE zones are contained within the felsitic intrusive suite, while the remainder, relate to their respective lettered Green Carbonate horizons."

"The mineralization in all of the zones is clearly related to silicification of the felsitic type dikes with accompanying pyrite, either in the A zone or the felsitic dikelets and tuff lenses caught up in the

green carbonate horizons. In addition, some visible gold is associated with quartz vein zones in the green carbonates, particularly the D1 zone."

All of the mineralized zones have some component of sericitic to fuchsitic and ankeritic alteration of the ultramafic and the felsic intrusive protoliths. Carbonate zones are typically stockworks with up to 60% quartz-ankerite and quartz veining. Siliceous to sericitic remnants of probable felsic intrusives are common in the carbonate intervals along with erratic felsite and syenite dykes. The intrusive remnants are normally the better mineralized parts of the system containing 3-5% disseminated pyrite, while the green carbonate rocks contain minor sulphides. Fine flecks of native gold are locally visible in the higher-grade corridors, and, are most often associated with quartz rather than quartz-ankerite veins.

Similar to the flat South Splay feature on the Anoki property, a flatly dipping structure is noted in the west part of the McBean property circa line 88 E. The structure is within Tisdale assemblage rocks near the western flank of the gabbro-diorite intrusive. Accessory carbonate alteration and felsic intrusives with erratic anomalous gold values are present (MB-96-06 with up to 0.8 g/t over 0.9 m) but there is insufficient data to establish a zone at present. The structure may be related to emplacement of the gabbro-diorite complex and/or related to the Dobie Fault (Fig. 25).

One cross structure is interpreted on the Anoki-McBean property. It is a northeast trending feature, named the Dobie Fault which tracks near the western margin of the gabbro complex. The cross fault also has some splay elements. No displacement is inferred but there is a notable thickening of the deformation sequence east of this corridor on the McBean segment, and, the 80 East Zone described in the Anoki environment is just west of this feature, at a similar orientation.

# 21.4 Exploration, Drilling and Recommendations, Anoki segment:

After the termination of the Queenston – Franco-Nevada joint venture, Queenston commenced exploration on the Anoki segment via a diamond drilling program on July 19, 2002. The initial target was the Anoki Deep Zone.

The field grid was re-established by G.L.S. Caron Inc from Sullivan, Quebec. An 18.7 km magnetic survey followed, in tandem with a 17.5 km Induced Polarization (IP) survey over the north part of the claim group in October 2002. The geophysical surveys were contracted to Geola Ltd from Val d'Or, Quebec. The IP survey was carried out using an IP-6 time domain receiver, and, a GDD-1400 (1.4 Kw) receiver. The configuration was pole-dipole with a=100 feet, n=1 to 6, plus, a test line with a=200 and n=1 to 8. The magnetic survey utilized a GSM-19 magnetometer

(GEM System) and an Envi-mag from Scintrex to measure total field and vertical gradient magnetics.

The primary target of the geophysical surveys was the 40 East Zone, with selected lines across the broader stratigraphic package. In general, the IP survey highlighted the stronger graphitic interflow units along with a couple of chargeability features hanging wall to the Cadillac-Larder Lake Break, and, low resistivities within and around the footwall of the break. No signature was assigned to the 40 East style of mineralization. The interpretation was complicated by the amount of infrastructure present, including hydro and telephone lines, underground workings, Highway 66, and, the Ontario Northland Railway.

The 2002 magnetic (mag) survey was integrated with the large magnetic database established during the Queenston – Franco-Nevada joint venture between 1996 and 2001. The survey highlighted three main features: an arcuate mag high tentatively correlated with an ultramafic sequence hanging wall to the Anoki South Zone, a moderate to well developed mag low over the Cadillac-Larder Lake Break, and, a mag high associated with the amphibolitized mafic tuffs of the Timiskaming assemblage along the north boundary of the Anoki segment.

In February 2003, Insight Geophysics completed a test survey over the Anoki South Zone. The survey was designed to develop a signature for the Anoki South mineralization, and, to assist in defining future targets, both in the Anoki South Zone and the Cadillac-Larder Lake Break environment. Four section lines were proposed although only three lines were completed before the upset limit of the contract was reached. The survey utilized an 8 Kw, time domain IP system with a penetration depth of more than 500 m. The survey was similarly hampered by infrastructure / culture in the area although the Anoki South Zone was detected as well as the Cadillac-Larder Lake Break, and, the flatly dipping portion of the South Splay structure.

The diamond drilling campaign on the Anoki property totaled 22,360.8 m in 44 drillholes. The program extended from July 19, 2002 to November 20, 2003. The first 26 drillholes, AN-02-19 to AN-03-44 inclusive, were contracted to Benoit Diamond Drilling of Val d'Or, Quebec between July 19, 2002 and May 5, 2003. The latter 18 drillholes, AN-03-45 to AN-03-62, were contracted to Heath and Sherwood (1986) Inc. from Kirkland Lake, Ontario. All of the drilling was NQ core size.

For drillhole locations, refer to Fig. 25.

Drillholes were collared via grid coordinates in the field. Both contractors employed metric rods. Given that the historic Anoki database was imperial, metric markers were converted to feet (and tenths of feet). The core was then logged by Queenston personnel using a k-edit format that was subsequently loaded into the logii system software. Elevations for the drillhole collars were estimated from a large database of topographic information, including previously surveyed drillholes.

The Anoki drilling campaign is divisible into four stages:

**Stage I** included 15 drillholes (AN-02-19 to AN-03-33). Drilling commenced on July 19, 2002 and was designed to define the parameters of the Anoki Deep Zone mineralization along strike from earlier results. This stage was diverted by the discovery of the Anoki South Zone in drillhole AN-02-20 (6.4 g/t gold over 4.1 m), such that the priority target for drillholes AN-02-24 to AN-02-33 was the Anoki South Zone. Only drillholes AN-02-19, AN-02-20, AN-02-22 and AN-02-23 fully sectioned the Anoki Deep environment.

**Stage II** included 10 drillholes (AN-03-34 to AN-03-43). There were multiple priorities in this stage: to follow up 40 East Zone mineralization encountered in prior Canico drillhole 82665 (0.9 g/t Au over 22.1 m) drilled in 1990; to test a number of IP responses along strike and north of the Anoki deposit, and; to evaluate a green carbonate zone (80 East Zone), north of the Cadillac-Larder Lake Break previously tested in 1944.

**Stage III** drilling returned to the Anoki South Zone. The drilling was partially guided by the Insight Geophysics survey in early 2003. Four drillholes AN-03-44 to AN-03-47 were planned to follow the Anoki South mineralization along strike and down plunge to the east.

The final **Stage IV** included 15 drillholes (AN-03-48 to AN-03-62). This program targeted the 40 East and 40 East, North zones, north of the Cadillac-Larder Lake Break in the volcaniclastic package. Several of these drillholes were also able to test other mineralized zones in addition to the priority 40 East targets.

Stage I results are tabulated as:

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	Zone
	(ft)		(m)	(m)	(m)	Width	(g/t)	Comments
AN-02-19	5400E/18500N	-53	330.6	333.2	2.6	2.6	0.5	Anoki Deep
	including		330.6	331.4	0.8	0.8	1.2	Anoki Deep
			397.6	399.7	2.1	N/A	1.6	Anoki Deep

Table 14: Anoki Drilling Results, Stage I

AN-02-20	6400E/18000N	-62	353.2	357.7	4.5	4.1	6.4*	Anoki South
	including		353.2	354.2	1.0	0.9	23.6	
			623.7	627.4	3.7	N/A	2.2	Anoki Deep
			644.8	648.5	3.7	N/A	1.7	Anoki Deep
			743.9	744.8	0.9	N/A	2.5	Anoki Deep
			753.1	754.0	0.9	N/A	1.8	Anoki Deep
AN-02-21	6400E/17800N	-62	407.0	410.0	3.0	2.7	16.3*	Anoki South
	(cut to 1 oz)		407.0	410.0	3.0	2.7	7.1	
	including		407.7	408.2	0.5	0.5	87.6	
AN-02-22	4400E/17660N	-67	424.4	425.3	0.9	N/A	0.4	Anoki Deep
			590.2	591.1	0.9	N/A	0.5	Anoki Deep
			593.0	594.1	1.1	N/A	0.7	Anoki Deep
AN-02-23	3600E/18490N	-62	73.2	75.0	1.8	N/A	0.5	Above Anoki Deep
			91.4	91.8	0.4	N/A	2.0	Above Anoki Deep
			197.9	201.3	3.4	N/A	0.5	Anoki Deep
AN-02-24	6400E/17590N	-63	454.0	456.0	2.0	1.9	0.6	Anoki South
	including		455.2	456.0	0.8	0.8	1.3	
			527.7	531.6	3.9	3.9	0.5	Anoki Deep
AN-02-25	6600E/17900N	-62	370.4	373.3	2.9	2.2	0.4	Anoki South
	including		372.3	372.7	0.4	0.3	1.5	
AN-02-26	6600E/17900N	-53	336.0	336.5	0.5	0.4	0.8	Anoki South
AN-02-27	6200E/17900N	-62	389.4	392.4	3.0	2.3	84.5*	Anoki South
	(cut to 1 oz)		389.4	392.4	3.0	2.3	13.7	
	including		389.9	391.5	1.6	1.2	154.1	
			466.7	474.1	7.4	7.4	0.5	Anoki Deep
AN-02-28	6200E/17700N	-62	318.7	319.7	1.0	0.8	1.1	Above Anoki South
			457.3	457.7	0.4	0.3	1.4	Anoki South
			498.2	501.2	3.0	3.0	0.4	Anoki Deep
AN-02-29	6200E/18078N	-61	275.8	276.7	0.9	0.7	0.4	Anoki South, upper
			284.2	286.2	2.0	1.5	0.5	Anoki South, upper
			318.6	319.3	0.7	0.5	1.6	Anoki South
AN-02-30	6000E/18000N	-62	301.8	302.7	0.9	0.7	1.0	Anoki South, upper
			311.7	312.3	0.6	0.5	0.7	Anoki South, upper
			353.8	354.5	0.7	0.6	2.7	Anoki South
AN-02-31	6400E/18100N	-57					NSV	Anoki South
AN-02-32	6000E/17767N	-61	350.2	350.7	0.5	0.5	0.6	Anoki South, upper

							NSV	Anoki South
			471.6	473.5	1.9	1.9	0.6	Anoki Deep
AN-03-33	6600E/17700N	-62	436.0	437.5	1.5	1.1	7.0*	Anoki South, upper
			451.8	461.3	9.5	6.9	1.9*	Anoki South
	including		456.4	461.3	4.9	3.6	3.4	
	including		456.4	457.3	0.9	0.7	14.8	
			528.7	536.0	7.3	7.3	0.6	Anoki Deep

N/A – indicates insufficient geological data to establish a true width
 * - zones have been rechecked at a second assay facility
 NSV – no significant values

Drillholes AN-02-19, AN-02-20, AN-02-22 and AN-02-23 sectioned the Anoki Deep environment from the South Splay to the Cadillac-Larder Lake Break as the primary target. Several other holes extended past the Anoki South Zone to the Anoki Deep / South Splay interface where carbonate rocks and highly altered volcaniclastics were locally well mineralized with pyrite – typified by a wider interval in drillhole AN-02-27 with 0.5 g/t over 7.4 m. The best assay in the Anoki Deep environment was 2.5 g/t over 0.9 m from drillhole AN-02-20 in a much deeper part of the stratigraphy (743.9-744.8 m).

The Anoki South Zone was discovered in hole AN-02-20 – 6.4 g/t gold over 4.1 m. It became the priority target in drillholes AN-02-24 to AN-03-33. Drillholes AN-02-26, AN-02-29, AN-02-30 and AN-02-31 were not extended from the Anoki South Zone to the South Splay structure. The highest grade interval in the Anoki South Zone was intersected in drillhole AN-02-27. It contained numerous sites of visible gold and assayed 84.5 g/t uncut (13.7 g/t cut to 1 oz) over 2.3 m, including 154.1 g/t over 1.2 m.

**Stage II** included 10 drillholes (AN-03-34 to AN-03-43) with multiple priorities: to follow up 40 East Zone mineralization; to test a number of IP responses along strike and north of the Anoki deposit, and; to evaluate a green carbonate zone (80 East Zone), north of the Cadillac-Larder Lake Break previously tested in 1944.

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	Zone
	(ft)		(m)	(m)	(m)	Width	(g/t)	Comments
82665 *	4030E/20015N	-45	37.8	60.2	22.4	22.1	0.9	40 East
(Canico	including		37.8	39.5	1.7	1.7	1.9	
drillhole in	and		57.7	58.6	0.9	0.9	10.5	

Table 15: Anoki Drilling Results, Stage II

1990)			65.7	67.8	2.1	2.1	1.6	40 East, North
AN-03-34	4200E/19790N	-55	81.1	130.4	49.3	47.6	0.5	40 East zones merged
	including		89.0	91.7	2.7	2.6	1.7	40 East
	and		127.1	130.4	3.3	3.2	1.8	40 East, North
AN-03-35	4800E/19600N	-55	22.1	46.6	24.5	N/A	0.5	48 East
	including		39.3	43.0	3.7	N/A	1.2	
			168.3	179.4	11.1	10.8	0.3	40 East
			182.9	184.7	1.8	1.7	1.1	40 East
			241.2	243.9	2.7	2.6	16.8	40 East, North
	(cut to 1 oz)		241.2	243.9	2.7	2.6	11.1	
	including		242.2	243.0	0.8	0.8	52.1	
AN-03-36	5400E/19900N	-53					NSV	40 East
			218.8	221.0	2.2	2.1	1.4	40 East, North
AN-03-37	6000E/19300N	-50					NSV	Above Anoki Deposit
AN-03-38	6800E/19780N	-60	97.5	106.7	9.4	7.8	0.7	In CLLB
	including		97.5	99.7	2.2	1.8	1.2	
	and		103.6	106.7	3.1	2.6	1.1	
			118.3	119.2	0.9	0.8	2.8	CLLB, footwall
							NSV	40 East area
AN-03-39	6800E/19070N	-45	271.9	273.7	1.8	1.7	0.6	CLLB, hanging wall
			303.3	304.2	0.9	0.9	9.5	CLLB, footwall
AN-03-40	7800E/20038N	-60	88.5	93.0	4.5	N/A	0.5	In CLLB / 80 East
			147.9	204.4	56.5	N/A	0.2	Vcic, 80 East
	including		203.7	204.4	0.7	N/A	3.1	
AN-03-41	7800E/19700N	-55	128.3	130.3	2.0	N/A	0.7	In CLLB / 80 East
			144.1	162.5	18.4	N/A	0.4	In CLLB / 80 East
	including		159.9	161.6	1.7	N/A	1.3	
			214.3	215.2	0.9	N/A	2.2	CLLB, footwall
AN-03-42	8200E/20400N	-55	29.2	33.5	4.3	N/A	0.7	Vcic, 80 East
(azimuth	including		31.7	33.5	1.8	N/A	1.0	
is 328)			49.2	50.0	0.8	N/A	1.3	Vcic, 80 East
AN-03-43	5400E/20100N	-55					NSV	40 East area
			165.0	174.4	9.4	8.8	1.2	40 East, North
	including		165.0	167.7	2.7	2.5	3.3	
		1	207.2	208.6	1.4	1.4	6.0	At Mafic tuff contact
	including		207.2	207.9	0.7	0.7	11.5	

		218.6	219.5	0.9	0.9	3.0	In Mafic tuff
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 * - Drillhole 82665 (drilled by Canico in 1990) is included in the table as the only previous drillhole into the 40 East Zone.
 CLLB – Cadillac-Larder Lake Break

Vcic - volcaniclastic

As noted above, the Stage II drilling had multiple priorities. Drillhole AN-03-34 was designed to follow up Canico drillhole 82665 (0.9 g/t over 22.1 m) in the 40 East Zone, along strike. In hole AN-03-34, the 40 East zones were merged with a broad section assaying 0.5 g/t over 47.6 m, including 1.7 g/t over 2.6 m (possible 40 East), and, 1.8 g/t over 3.2 m (possible 40 East, North Zone). The best assays for the 40 East Zone were found in drillhole AN-03-34.

Hole AN-03-35 was planned to test an IP feature in the hanging wall of the Cadillac-Larder Lake Break and subsequently proceed through the 40 East stratigraphy. This hole discovered the 48 East Zone mineralization, assaying 0.5 g/t over 24.5 m, including a best section of 1.2 g/t over 3.7 m.

The 40 East, North Zone mineralization was first evident in drillhole AN-03-36 (1.4 g/t over 2.1 m), followed up by hole AN-03-43 (1.2 g/t over 8.8 m, including 3.3 g/t over 2.5 m), and, the extension of hole AN-03-35 from 169.9 m to 324.6 m (16.8 g/t uncut over 2.6 m, including 52.1 g/t over 0.8 m). The intersection in AN-03-35 was the best result in the 40 East, North Zone.

An IP feature was the primary target in drillhole AN-03-36, with a combination of IP and Insight anomalies being the target for holes AN-03-38 and AN-03-39. Drillhole AN-03-37 was a sectional hole well above the Anoki Main mineralization that yielded only low results.

Drillholes AN-03-40, AN-03-41 and AN-03-42 tested the stratigraphy around the green carbonate zone known as the 80 East Zone. Historic assays of 6.29 g/t over 3.63 m, including 41.83 g/t over 0.46 m, were not duplicated in the 2003 drilling – the best interval was 3.1 g/t over 0.7 m, within a broad, low-grade zone assaying 0.2 g/t over 56.5 m in drillhole AN-03-40.

**Stage III** drilling included four drillholes (AN-03-44 to AN-03-47 inclusive) on the Anoki South Zone. The drilling was partially guided by the Insight Geophysics survey in early 2003.

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	Zone
	(ft)		(m)	(m)	(m)	Width	(g/t)	Comments
AN-03-44	6600E/17470N	-62	442.1	444.8	2.7	N/A	1.8	Above Anoki South
	including		443.0	444.0	1.0	N/A	3.2	
			476.5	478.6	2.1	N/A	0.7	Above Anoki South
							NSV	Anoki South
			572.9	575.2	2.3	2.3	0.5	Anoki Deep
AN-03-45	6800E/17600N	-62	429.2	444.5	15.3	11.9	0.4	Anoki South
	including		432.4	435.6	3.2	2.5	0.9	
AN-03-46	7000E/17500N	-63					NSV	Anoki South
			573.5	576.2	2.7	2.7	0.6	Anoki Deep
AN-03-47	7200E/17500N	-64					NSV	Anoki South absent
			793.1	815.7	22.6	N/A	0.7	Anoki Deep
	including		793.9	797.6	3.7	N/A	1.3	
	and		803.0	811.5	8.5	N/A	1.0	
			895.4	897.9	2.5	N/A	0.7	Anoki Deep

Table16: Anoki Drilling Results, Stage III

Only drillhole AN-03-47 fully sectioned the Anoki Deep environment – best interval of 0.7 g/t over 22.6 m, including 1.3 g/t over 3.7 m. At that location (AN-03-47), the Anoki South Zone was absent due to the infringement of an ultramafic package which appeared to affect most of the other drillholes in this area. Weak mineralization was encountered on the Anoki South Zone in drillhole AN-03-45, with 0.4 g/t over 11.9 m, including 0.9 g/t over 2.5 m.

**Stage IV** included 15 drillholes (AN-03-48 to AN-03-62). Based on the results from Stage II, this program targeted the 40 East and 40 East, North zones. Several of these drillholes were also able to test other mineralized zones in addition to the priority 40 East North targets.

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	Zone
	(ft)		(m)	(m)	(m)	Width	(g/t)	Comments
AN-03-48	4000E/19685N	-56					NSV	40 East zones
AN-03-49	4800E/19280N	-56	86.3	119.8	33.5	N/A	0.4	48 East
	including		95.1	97.8	2.7	N/A	0.8	
			233.0	260.4	27.4	27.3	0.2	40 East

Table 17: Anoki Drilling Results, Stage IV

			307.6	315.2	7.6	7.5	1.2	40 East, North
	including		310.4	313.1	2.7	2.7	2.1	
AN-03-50	4600E/19350N	-56	87.8	89.2	1.4	N/A	0.4	48 East
			223.8	234.5	10.7	10.1	0.3	40 East
			256.4	287.5	31.1	30.9	0.5	40 East zones
								merged
	including		278.6	283.5	4.9	4.9	1.0	40 East, North
AN-03-51	4200E/19500N	-56	33.8	36.3	2.5	N/A	0.6	48 East
							NSV	40 East zones
AN-03-52	5000E/19460N	-56	10.6	13.7	3.1	N/A	1.1	48 East / Anoki
			30.7	47.6	16.9	N/A	0.5	48 East / Anoki
	including		44.5	46.6	2.1	N/A	2.1	
			95.9	96.9	1.0	N/A	6.0	48 East, typical
			230.8	237.2	6.4	6.1	0.3	40 East
			300.9	305.2	4.3	4.1	1.8	40 East, North
	including		301.9	302.7	0.8	0.8	4.4	
AN-03-53	5200E/19900N	-56	13.4	19.8	6.4	N/A	0.7	48 East
	including		13.4	14.3	0.9	N/A	3.7	
							NSV	40 East Zone
			204.4	205.2	0.8	0.8	1.2	40 East, North
			235.4	237.2	1.8	1.8	0.5	40 East, North
AN-03-54	4600E/19850N	-60	75.7	91.2	15.5	14.7	0.2	40 East
			155.1	157.2	2.1	2.1	0.6	40 East, North
AN-03-55	5600E/20150N	-56					NSV	40 East Zone
			163.3	170.4	7.1	6.9	0.5	40 East, North
			189.3	219.8	30.5	29.5	0.3	40 East, North
	including		195.1	200.6	5.5	5.3	0.8	
AN-03-56	5800E/19998N	-57					NSV	40 East Zone
			221.7	236.9	15.2	14.7	0.9	40 East, North
	including		231.4	234.1	2.7	2.6	2.0	
			236.9	250.8	13.9	13.5	0.4	40 East, North
	including		249.7	250.8	1.1	1.1	2.4	
AN-03-57	6000E/20000N	-57	141.7	145.7	4.0	3.8	0.3	40 East Zone
		1	237.2	238.8	1.6	1.6	0.5	40 East, North
AN-03-58	4822E/20064N	-55					NSV	40 East Zone
			115.8	120.7	4.9	4.8	1.2	40 East, North

AN-03-59	5800E/20250N	-57					NSV	40 East Zone
			169.2	173.8	4.6	4.3	0.6	40 East, North
	including		171.0	172.8	1.8	1.7	1.1	
			182.3	184.4	2.1	2.0	0.7	40 East, North
AN-03-60	5400E/20480N	-62	63.4	73.2	9.8	8.9	0.7	40 East, North
	including		66.8	67.9	1.1	1.0	2.4	
			92.4	93.3	0.9	0.8	2.8	40 East, North
			109.1	115.8	6.7	6.2	0.4	40 East, North –
								above mafic tuff
AN-03-61	6000E/19300N	-62	78.8	101.5	22.7	7.0	1.3	Anoki, footwall
	including		88.7	92.1	3.4	1.1	2.9	
			195.7	198.6	2.9	N/A	2.0	48 East
	including		195.7	196.6	0.9	N/A	4.0	
			364.3	370.4	6.1	5.5	0.2	40 East
			452.7	505.8	53.1	49.6	0.4	40 East, North
	including		452.7	454.8	2.1	2.0	1.2	
AN-03-62	5600E/19285N	-59	51.5	64.5	13.0	4.2	2.1	Anoki Main
	including		59.8	60.8	1.0	0.3	14.4	
			68.9	71.0	2.1	0.7	3.4	Anoki Main
			75.0	92.1	17.1	5.6	0.9	Anoki Main
	including		81.1	83.7	2.6	0.8	4.1	
			114.1	120.4	6.3	2.1	1.0	Anoki footwall
			141.1	143.3	2.2	0.7	2.0	Anoki footwall
			156.5	168.6	12.1	N/A	1.8	48 East / footwall
	including		161.0	163.6	2.6	N/A	4.4	
			194.7	214.9	20.2	N/A	0.9	Anoki Deep
	including		201.3	210.6	9.3	N/A	1.5	
							NSV	40 East Zone
			417.4	419.8	2.4	2.2	0.4	40 East, North

Drillholes AN-03-61 and AN-03-62 were drilled as deeper tests of the 40 East, North Zone. In both cases, and to a lesser extent in drillholes AN-03-49 through AN-03-52, the broader stratigraphic package was able to be sectioned yielding new intersections for some of the other mineralized zones (i.e. the Anoki deposit Southern / Main and Footwall zones, 48 East and Anoki Deep environments).

The 40 East, North environment varied from wider, low-grade corridors (AN-03-55 with 0.3 g/t over 29.5 m, including 0.8 g/t over 5.3 m), to narrower, more site-specific intersections as AN-03-52, with 1.8 g/t over 4.1 m, including 4.4 g/t over 0.8 m. Hole-to-hole correlation of the 40 East, North Zone is subject to interpretation in drillholes AN-03-53, AN-03-57 and AN-03-59.

Alteration and mineralization up-dip of the Anoki deposit was intersected in drillhole AN-03-62 encountering substantial intervals (13.0 m and 17.1 m) with anomalous gold that reflect the northerly dip of the sequence near surface – true widths are considerably less at 4.2 and 5.6 m respectively. Assays from the Anoki deposit environment in AN-03-62 include 2.1 g/t over 4.2 m (including 14.4 g/t over 0.3 m), 3.4 g/t over 0.7 m, and, 0.9 g/t over 5.6 m (including 4.1 g/t over 0.8 m) in the southern sequence (RPA lens #1 and #2 location), and; 1.0 g/t over 2.1 m, plus 2.0 g/t over 0.7 m in the footwall rocks (RPA lens #6 and #7 area). Only the footwall rocks were tested in drillhole AN-03-61, intersecting 1.3 g/t over 7.0 m (core length of 22.7 m), including 2.9 g/t over 1.1 m.

As noted above, drillholes AN-03-61 and AN-03-62 cross sectioned the stratigraphic package from the Anoki deposit through the 48 East Zone, Cadillac-Larder Lake Break, and 40 East Zone to the 40 East, North Zone. Drillhole AN-03-62 also cut the Anoki Deep Zone, intersecting 0.9 g/t over 20.2 m, including 1.5 g/t over 9.3 m. Several drillholes encounter the 48 East Zone, with best assays of 6.0 g/t over 1.0 m in AN-03-52, and, 1.8 g/t over 12.1 m, including 4.4 g/t over 2.6 m in AN-03-62. The 48 East Zone intersection in hole AN-03-62 is very close to the footwall zones of the Anoki deposit, near the South Splay structure.

The Anoki project was the most ambitious drill program during 2002 and 2003. In addition to the discovery of the Anoki South Zone, a number of targets evolved, and, the geological understanding of the area improved considerably. Opportunities exist for expanding the main and footwall segments of the Anoki deposit, discovering other Anoki South style mineralized zones and advancing the 48 East Zone mineralization in Tisdale assemblage rocks, in addition to further work on the Anoki Deep, 40 East, 40 East North and 80 East zones in Timiskaming assemblage rocks. Diamond drilling of a number of these targets would be more cost effective from underground. To that end, scoping studies on the Anoki resources need to be revisited, in consort with developments on the McBean segment before a drill budget can be proposed.

# 21.5 Exploration, Drilling and Recommendations, McBean segment:

Exploration over the McBean segment commenced on September 30, 2003 as the first of two phases of diamond drilling. Phase I consisted of four holes – MB-03-30 to MB-03-33 (1,390 m)

drilled between September 30 and November 27, 2003. Phase II included 13 holes – MB-05-34 to MB-06-46 inclusive (6,788 m) between October 2005 and December 20, 2006. Phase I was contracted to Heath and Sherwood (1986) Inc. from Kirkland Lake, Ontario. Benoit Diamond drilling from Val d'Or, Quebec was the contactor for Phase II. All of the drilling was NQ core size.

For drillhole locations, refer to Fig. 25.

Drillholes were spotted via grid coordinates in the field, supplemented by GPS and/or tied into previous drill casings when field conditions were less than ideal. The core was logged by Queenston personnel on computer using a simple k-edit format that could be loaded into the logii system – the geological software used in Phase 1 and the first two holes (MB-05-34 and MB-05-35) in Phase II. The balance of Phase II was logged in a Microsoft Excel format that was subsequently loaded into Surpac software. Elevations were estimated from a large database of topographic information including previously surveyed drillholes.

The Phase I drilling was designed to follow up three historic drillholes around the Murphy (#1) shaft. The three drillholes (M1, M2 and M3), spaced 200 ft apart were assumed to predate sinking of the Murphy shaft in 1928. The central drillhole (M1) was closest to the shaft and indicated 49.0 g/t gold over 1.1 m at a vertical depth of 83.2 m, and, 7.2 g/t over 3.0 m at a vertical depth of 155.8 m from the underground plans. No assay values were indicated in the adjacent holes and drill logs for all three holes have been lost. Limited work on the 550-ft (167.7 m) level generated a best assay of 1.9 g/t over 1.2 m from an altered zone in underground drillhole 450 – most closely correlating with the 49.0 g/t over 1.1 m in hole M1. The Murphy shaft zone is interpreted to be related to the North Break. It occurs in a similar geological position as the 40 East Zone on the Anoki property some 1.2 to 1.8 kms west, which was being drill tested during the same time period.

The results of the Phase I drilling are tabulated as:

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	Zone
	(ft)		(m)	(m)	(m)	Width	(g/t)	Comments
MB-03-30	20850N/10000E	-58	148.7	151.8	3.1	2.5	9.6*	Shaft Zone
	including		150.9	151.8	0.9	0.7	32.0	
			158.5	160.3	1.8	1.4	0.6	footwall
	including		159.7	160.3	0.6	0.5	1.2	
MB-03-31	20900N/10200E	-51	174.7	186.9	12.2	10.7	0.5	footwall

Table 18: Mc	Bean Drilling	Results,	Phase I
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	including		182.6	184.1	1.5	1.3	1.7	
			241.8	243.9	2.1	1.9	0.6	footwall
	including		241.8	242.4	0.6	0.5	2.0	
MB-03-32	20500N/10000E	-62	320.3	320.7	0.4	0.3	1.8	footwall
MB-03-33	20885N/9800E	-55					NSV	

* - metallic assay value of 32.0 g/t used as most representative. NSV = no significant values

All four of the drillholes in the Phase I program (MB-03-30 to MB-03-33 inclusive) intersected a 20 to 30 m, strongly bleached and altered corridor within the volcaniclastic package dipping 65 to 75 degrees south. The corridor is best described as a carbonate zone with relict volcaniclastic textures. It is moderate to strongly foliated, and, is well altered with ankerite and sericite, plus or minus chlorite and fuchsite. Veining averages 10%, foliation-parallel, quartz-ankerite stringers with up to 5-7% disseminated pyrite over a few millimeters in the adjacent wallrock. Hole MB-03-30 (9.6 g/t over 2.5 m, including 32.0 g/t over 0.7 m) most closely correlates with the upper intersection in drillhole M1, encountering grey to smoky, quartz-ankerite veining with traces of visible gold at 150.9 m. This intersection is within the bleached corridor roughly 45 m below the 49.0 g/t over 1.1 m in historic hole M1. The lower interval of 7.2 g/t over 3.0 m in drillhole M1 is not duplicated in the current drilling. Assays within the bleached corridor are considerably lower in the down-dip and adjacent drillholes, however, flanking zones of dark chlorite and ankerite alteration are often anomalous in gold content as: 0.5 g/t over 10.7 m, including 1.7 g/t over 1.3 m in drillhole MB-03-31.

The Phase II drilling had a different objective. It was planned to begin upgrading of the historic McBean resource to NI 43-101 standards, and, assist in the interpretation of the Cadillac-Larder Lake Break / deformation corridor. The first two holes (MB-05-34 and MB-05-35) were drilled in 2005, followed by an 11-hole program in 2006.

Hole #	Coordinates	Dip	From	То	Interval	True	Assay	Zone
	(ft)		(m)	(m)	(m)	Width	(g/t)	Comments
MB-05-34	9700E/19080N	-58	268.6	276.5	7.9	6.2	4.1	Zone A
	including		268.6	270.5	1.9	1.5	6.1	
	And		275.6	276.5	0.9	0.7	8.9	
			302.3	310.2	7.9	6.2	1.4	Zone B
			339.6	343.5	3.9	3.1	1.5	Zone C

Table 19: McBean Drilling Results, Phase II

MB-05-35	9700E/18950N	-58	322.6	335.0	12.4	9.8	3.7	Zone A
	including		327.2	328.9	1.7	1.3	9.4	
			340.0	344.2	4.2	3.3	3.3	Zone B
			365.5	392.5	27.0	21.3	3.0	Zone C
	including		369.7	375.1	5.4	4.3	9.4	
MB-06-36	10300E/18875N	-67	478.5	484.9	6.4	4.4	1.1	A (with carbonate)
	including		481.7	482.5	0.8	0.5	5.4	
			503.5	523.0	19.5	13.3	0.8	Zone C2
	including		513.0	515.1	2.1	1.4	4.6	
MB-06-37	10175E/19000N	-67	399.4	415.0	15.6	10.6	2.6	Zone A
	including		401.5	402.3	0.8	0.5	9.2	
	And		412.4	415.0	2.6	1.8	5.2	
			445.0	447.3	2.3	1.6	7.6	Zone CM
			455.4	458.7	3.3	2.3	2.5	Zone C1
MB-06-38	10300E/19100N	-62	379.8	381.9	2.1	1.6	3.0	Zone C2
MB-06-39	9600E/18800N	-63					NSV	West of zones
MB-06-40	10450E/19000N	-64	344.3	351.0	6.7	4.8	4.6	Zone H
	including		345.9	348.8	2.9	2.1	7.7	
			401.3	409.6	8.3	6.0	4.1	Zone A
	including		402.0	405.3	3.3	2.4	7.4	
MB-06-41	9775E/19000N	-65	335.0	353.9	18.9	13.4	1.8	Zone A
	including		335.9	338.6	2.7	1.9	4.5	
			378.6	380.6	2.0	1.4	5.1	Zone B
			412.4	416.3	3.9	2.8	4.0	Zone C
	including		414.7	416.3	1.6	1.1	6.2	
MB-06-42	10450E/18900N	-70	434.6	439.9	5.3	3.4	3.1	Zone A
	including		438.0	439.9	1.9	1.2	7.1	
			465.2	471.3	6.1	3.9	1.9	Zone C2
	including		465.2	466.8	1.6	1.0	5.8	
MB-06-43	10025E/19110N	-69	332.9	411.6	78.7	51.6	1.1	Felsite + green carb
	including		380.0	381.8	1.8	1.2	4.1	Zone B1
	And	1	404.8	408.5	3.7	2.4	9.3	Zone B2
MB-06-44	10000E/19200N	-66	290.3	294.6	4.3	3.0	2.7	Zone A
	including		293.8	294.6	0.8	0.6	6.6	
			327.4	333.8	6.4	4.4	1.3	Zone B2
MB-06-45	9900E/19200N	-66	302.8	304.2	1.4	1.0	3.0	Zone B

			325.0	329.8	4.8	3.3	0.9	Zone C
MB-06-46	10200E/18740N	-64	474.4	475.8	1.4	1.0	2.0	Zone A
			484.6	516.1	31.5	22.6	0.9	C2 + CM + C1
	including		491.0	491.9	0.9	0.6	5.9	Zone C2
	And		509.8	510.6	0.8	0.6	9.3	Zone C1

True widths are calculated using the dip of the drillhole and the average dip of the zones.

Drillholes MB-06-43 and MB-06-44 are shown on Fig. 28.

Highlights of the Phase II drilling include

: the A Zone with 3.7 g/t gold over 9.8 m, including 9.4 g/t over 1.3 m in hole MB-05-35, and, 4.1 g/t over 6.0 m, including 7.4 g/t over 2.4 m in MB-06-40. Drillhole MB-06-40 also encountered a zone hanging-wall to Zone A (Zone H), returning 4.6 g/t over 4.8 m, including 7.7 g/t over 2.1 m. The first zone in drillhole MB-06-36 (1.1 g/t over 4.4 m, including 5.4 g/t over 0.5 m) is interpreted to be the A Zone, although there are associated green carbonate rocks at that location.

: the B Zone with 5.1 g/t over 1.4 m in drillhole MB-06-41, and, a broad zone of felsite and green carbonate rocks assaying 1.1 g/t across a core length of 78.7 m (51.6 m true thickness) in MB-06-43, that includes a B1 component of 4.1 g/t over 1.2 m, and, a B2 component of 9.3 g/t over 2.4 m, and;

: the C Zone with 3.0 g/t over 21.3 m, including 9.4 g/t over 4.3 m in drillhole MB-05-35, and, 4.0 g/t over 2.8 m, including 6.2 g/t over 1.1 m in MB-06-41. A wider altered and mineralized C Zone in drillhole MB-06-46 (0.9 g/t over 22.6 m), includes a C2 component of 5.9 g/t over 0.6 m, and, a C1 component of 9.3 g/t over 0.6 m.

No significant values were encountered in drillhole MB-06-39, the westernmost of the drillholes.

No further drilling is recommended on the #1 shaft area (North Break environment) at this time.

The drilling to upgrade the historic McBean resource to NI 43-101 standards should continue. The Phase II drilling tested the shallower sections of the 1997 historic resource (basically from 300-450 m). More detailed data on the second tier, from 450 to 600 m, are warranted.

### 22.0 PRINCETON-MAYFAIR PROPERTY

#### 22.1 Description, Location and History:

The Princeton-Mayfair property consists of 23 claims in southeastern Gauthier Township (Fig. 21). Seventeen of the claims are patented for mining rights only, and, the remaining six claim units are unpatented. The seventeen patented claims form the historic Princeton property. They were purchased from Timmins Forest Products on April 17, 1996. Timmins Forest Products retain the patented surface rights and hold a 1.5% NSR royalty on the mineral rights. The six unpatented claims are part of the historic Mayfair property, which came open for competitive staking on June 1, 1998. All 23 claims are subject to the Newmont royalty. Claim specifics are detailed in Appendix A.

The Princeton-Mayfair property abuts the Anoki-McBean claims (west). Historically, the Princeton and Mayfair portions operated independently until 1998, when both properties became owned by Queenston Mining.

The Princeton portion is covered by northeast-trending (035 degrees) grid lines spaced 200 ft apart. The baseline azimuth of 125 degrees, is roughly sub parallel to the trend of the Cadillac-Larder Lake Break in this area – some eighteen degrees more southerly than the adjacent McBean property where the deformation zone averages 107 degrees. The grid was last cut in 1998 and has seriously deteriorated but pickets are still visible.

At the request of the surface rights owner, flag lines trending due north were established over the five easternmost Mayfair claims in 2000. Some 14 kms of flag lines, 200 ft apart exist.

The Princeton section contains two existing shafts, the Ritchie and the Victoria. Both shafts are within the deformation corridor associated with the Cadillac-Larder Lake Break and are roughly 850 m apart. The Ritchie shaft is in the northwest part of the property. It extends to a depth of 528 ft (161 m) with the main working level at 500 ft (152 m). The shaft is capped. The Victoria shaft is located in the west central part of the property. It was sunk to a depth of 100 ft (30 m), with minor lateral development at 40 and 100 ft. In June 2000, the shaft was backfilled to surface and the surrounding area contoured.

One of three, shallow Olivet shafts occurs on the Mayfair claims. Little historic data are available on the shaft. It was visited during a geological survey in 2000. A small muck pile was noted, and, the shaft appears to have been backfilled.

Highway 66 touches the southeast corner of the Princeton claims and the Ontario Northland Railway cuts southeasterly across the Mayfair section. Pre-existing roads and trails utilized by logging operations extend from Highway 66 to an area west of the Victoria shaft in the westcentral part of the property. Similar vintage logging roads occur on the Mayfair claims, along the north boundary of the group, and, in the southwestern part of the claims. The far western part of the Princeton-Mayfair property is accessible via a bush road that extends southeast from the McBean open pit, past the Ritchie shaft. The property is within the Corporation of the Township of Gauthier – the townsite of Dobie (population 130) is roughly one km northwest of the claims. The property is accessible on a year-round basis.

The eastern two thirds of the Princeton claims and the western part of the Mayfair section was logged prior to Queenston's purchase of the mining rights in 1996. Today, that area is characterized by immature poplar and alders with isolated growths of birch and spruce. The western third of the property hosts alder and spruce swamps in the lower lying sections, with poplar, spruce and fir in the higher ground, and, local stands of jack pine in some of the highest areas with outcrop exposure. The eastern part of the Mayfair portion is characterized by mature poplar on the higher ground, with spruce and fir in the middle elevations, and, alder and spruce swamps to bogs in low lying areas. Overburden depths tend to be less than 30 m of glacial till and glaciolacustrine clays, silts and sands. The more clay-rich soils erode easily and gullies are locally developed in the hummocky terrain. Topography is in the order of a few ten's of meters from outcrop regions to lower lying swamps and creeks.

The history of the two property segments is treated separately. The Princeton history includes:

**1912**: Victoria Creek Gold Mines; 'Victoria' shaft to 100 ft (30 m), 73 m lateral development on 40 and 100-ft levels.

**1928-29**: Ritchie Gold Mines; shaft to 528 ft (161 m), 374 m underground development on 500-ft level; 610 m underground drilling.

**1936-37**: Consolidated Mining and Smelting Co. of Canada; Ritchie shaft dewatered; 13 surface drillholes (1,190 m), 1,288 m underground drilling; 133 m of x-cutting, 100 m

drifting, 7 m raising; no ore found, operations ceased in 1937.

**1944**: Cominco; 20 surface drillholes to test Larder Lake "Dolomite" zone, all assays less than 1.71 g/t (0.05 oz).

**1947**: Princeton Gold Mines; 4 surface drillholes adjacent to Queenston boundary.

**1975-77**: Cominco; mapping, soil geochem and geophysical (IP, magnetics and EM) surveys; 7 drillholes (678 m).

1980: E&B Explorations; 4 drillholes (916 m).

**1985-88**: Canico option; IP survey, overburden stripping, 3 drillholes (466 m) in 1985; 8 drillholes (1,423 m) in 1987 on Ritchie Zone; deep programme adjacent to McBean not carried out, option dropped in 1988.

**1988-89**: Sudbury Contact Mines; magnetic survey; 7 drillholes (2,035 m) as deeper sections on Cadillac-Larder Lake Break.

**1996-2001**: Queenston – Franco-Nevada joint venture; geological mapping, overburden stripping; magnetic and IP surveys; 7 drillholes (3,246 m), including two deeper holes east of McBean (1,918m), and, 5 holes on North Carb Structure (1,406 m).

2002-06: Queenston Mining; 10 drillholes (11,334 m).

The history of the Mayfair property is summarized as:

**1928-38**: Olivet Gold Mines; geological and geophysical surveys; surface trenching and pitting with three shallow shafts (one on current claims); 29 surface drillholes (4,483 m) - 6 holes on current claims.

1939: Ventures Ltd. option; 11 drillholes (915 m).

**1976-98**: Mayfair Mines; magnetic and VLF-EM surveys; geological mapping; 4 drillholes (none on current property).

**1998-2001**: Queenston – Franco-Nevada joint venture; mapping and geophysical surveys (magnetics and VLF-EM).

2002-06: Queenston Mining; no new work undertaken.

There is no past production on the Princeton-Mayfair property, and, no resources are currently developed.

# 22.2 Property Geology and Mineralization:

The dominant geological feature on the Princeton-Mayfair property is the Cadillac-Larder Lake Break (Fig. 22). It strikes southeasterly across the claims to the southeast corner of Gauthier Township, before turning more easterly to northeasterly in McVittie Township and onward through McGarry Township to the Quebec border. The Kerr Addison mine, which produced more than 10 million oz of gold, occurs along the northeast trending portion of the Cadillac-Larder Lake Break in McGarry Township.

The change in strike of the Cadillac-Larder Lake Break on a regional scale is also accompanied by a change in dip. The rocks dip southerly in Gauthier and McVittie townships, passing through the vertical near the McGarry / McVittie township line, with a prominent northerly dip of 70 to 85 degrees north at the Kerr Addison mine.

As elsewhere in the Kirkland Lake camp, the Cadillac-Larder Lake Break on the Princeton-Mayfair property is a broad deformation corridor that tends to cue along the Tisdale assemblage / Timiskaming assemblage contact. The North Break also continues onto the Princeton-Mayfair lands and is crudely subparallel to the Cadillac-Larder Lake Break, some 300 to 500 m further north. Like the North Break lozenge on the Pawnee property, the intervening Timiskaming assemblage between the two breaks is variably altered and deformed, with narrow sections of ultramafic, mafic and carb rocks intercalated with the Timiskaming assemblage sediments and alkalic volcanics (Fig. 22). There is limited knowledge on the North Break, which is interpreted to have a southerly dip across the area.

The regional changes in strike and dip on the Cadillac-Larder Lake Break are similarly reflected on the property scale. Alteration and deformation are found to be subtly crosscutting the stratigraphy in strike dimension as well as a dip dimension on the Princeton-Mayfair claims. Subtle changes in strike are difficult to perceive in a coarse-spaced drilling program but the stratigraphy mapped on the Mayfair sector begins to have a more easterly to northeasterly strike in the eastern part of the property. The stratigraphy there has a southerly dip, while the structural fabric dips vertical to steeply north. Changes in dip are also noted from the diamond drilling on the Princeton lands. The Cadillac-Larder Lake Break dips 50 to 75 degrees south in the far western limits of the property (at the Anoki-McBean boundary), steepening to subvertical with some north-dipping elements by the eastern edge of the Princeton claims.

The stratigraphy includes basaltic to ultramafic flows with units of chert and interflow material of the Tisdale assemblage, in contact with younger silts, wackes, conglomerates and tuffaceous rocks of the Timiskaming assemblage. The Tisdale assemblage is cut by numerous syntectonic dykes to stocks and plugs of felsic intrusive, in addition to the 1-km diameter gabbro-diorite complex noted on the adjacent Anoki-McBean property. The gabbro-diorite complex is roughly centered in the hanging wall of the Cadillac-Larder Lake Break, south of the McBean open pit. Its eastern fringes extend onto the Princeton-Mayfair property.

Larger stocks to plugs of felsic intrusives are most common in the western third of the property, seriously limiting correlation within the host Tisdale assemblage rocks. Felsic intrusives range from granite to feldspar porphyry, in addition to local syenite dykes. The granitic dykes to plugs are locally highly altered to bleached and are more typically logged as aplite.

Dykes of late-stage, Matachewan diabase are present on the property, but are rare.

Mineralization at the Ritchie shaft (furthest west) is related to a package of felsic intrusive and green carbonate rocks within a few meters to tens of meters of the Tisdale assemblage / Timiskaming assemblage contact. The rocks are highly altered and deformed. The felsic intrusives are veined with 15-20% ankerite-quartz stringers and mineralized with an average of 2-3% disseminated to fracture controlled pyrite. The felsic dykes promote alteration of the host

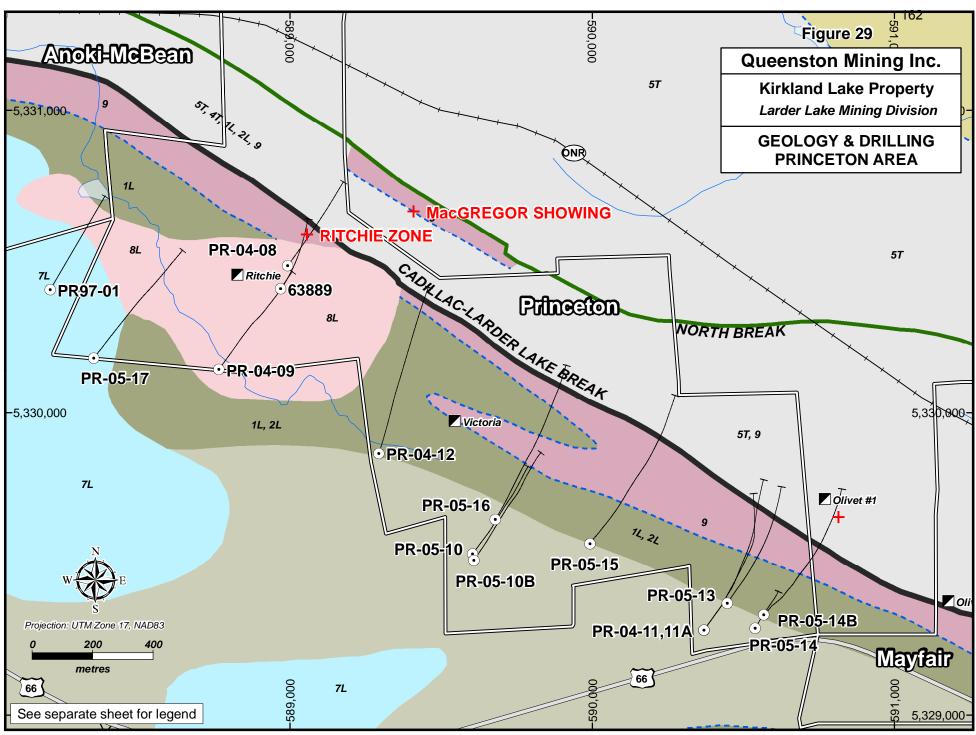
ultramafics to green carbonate via accessory ankerite, sericite and fuchsite / paragonite. The carbonate rocks are erratically veined with 5-50% ankerite-quartz veins but are very sparsely mineralized with only trace amounts of pyrite.

Two vein systems were initially investigated at the Ritchie shaft. One vein system was within the felsic intrusive, with a second at the intrusive / green carbonate contact. Both systems are sheared, silicified and pyritic. Quartz veins range from tiny veinlets to 40-cm sized, massive, blue grey cherty stringers. Pyrite is normally coarse grained with pyrite clusters and streaks developed in the more strongly altered and deformed rocks. Early results on surface (up to 127 g/t, or 3.70 oz/ton), underground (as 6.14 g/t across 2.99 m by 10.67 m, and; 13.54 g/t across 1.13 m by 10.67 m), and, diamond drilling (7.89 g/t over 4.57 m in felsite, and, 20.33 g/t over 2.74 m in green carbonate) were not duplicated in later drilling. The best drillhole by Canico in 1987 (hole 63889), intersected 1.78 g/t gold over 4.57 m in the felsite zone, plus 2.23 g/t over 5.15 m and 1.58 g/t over 2.44 m in green carbonate rocks at vertical depths of 75 to 100 m (Fig. 29).

Less is known about the Victoria shaft mineralization in the west central part of the property. The shaft is located some 200 m south of the Tisdale assemblage / Timiskaming assemblage contact in altered Tisdale assemblage rocks. The shaft was sunk on stockwork style ankerite-quartz veining within green carbonate rocks. The waste dump suggests that strong alteration was short lived due a common presence of talcose ultramafic samples. One drillhole in the 2004-05 program (PR-04-12) tested the Victoria zone at a vertical depth of 280 m (Fig. 29). At that location, the Tisdale assemblage was near obliterated by a series of thick felsic to aplitic intrusions that extended north to the Tisdale assemblage / Timiskaming assemblage contact. No significant gold values were encountered.

The Olivet shaft on the Mayfair sector, is within altered and mineralized, Timiskaming assemblage sediments (Fig. 22). The rocks are moderate to strongly schistose and variably altered with ankerite, sericite and fuchsite. Fine quartz and quartz-ankerite veinlets, sweats and larger boudinaged veins are found at the shaft location with up to 1% pyrite in the adjacent wallrocks. None of the samples from the surface mapping program are more than weakly anomalous in gold content – up to 0.09 g/t.

In the far western reaches of the property, mineralization down plunge from the McBean deposit was tested during the Queenston – Franco-Nevada joint venture. The McBean mineralization is similar to the Ritchie occurrences in that there are a series of green carbonate intervals within the deformation zone that are veined, mineralized and commonly associated with syntectonic felsic



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intrusives. A best intersection of 1.58 g/t gold over 8.93 m, including 3.74 g/t over 1.68 m was intersected at a vertical depth of 850 m in hole PR-97-01 (Fig. 29).

One prominent surface feature of the Princeton sector is a series of green carbonate exposures. They extend for roughly 1500 m along the Cadillac-Larder Lake Break corridor, in sections up to 400 m thick with variable ankerite-quartz veining and felsic intrusives. This area was mapped and sampled in detail between 1997 and 1998 but gold values were generally lacking. Given that the carbonate alteration is important, and, that there is little depth information in this area, deeper tests of the stratigraphy became a priority target in the 2004-05 drilling program.

The North Break structure was tested by five holes during the Queenston – Franco-Nevada joint venture. The main target was a sericitic to fuchsitic carbonate zone with historic assays of up to 7.54 g/t gold over 1.37 m in a finely mineralized green carbonate to carbonated basaltic host (MacGregor showing, Fig. 29). Best assays from the joint venture program were 0.75 gms over 1.62 m, and, 0.89 gms over 1.52 m, within a cherty tuff unit. The option was allowed to lapse.

#### 22.3 Exploration, Drilling and Recommendations:

Since the geological mapping and geophysical surveys in 2000, no new work has been undertaken on the Mayfair segment of the Princeton-Mayfair property. Two phases of diamond drilling, however, were undertaken on the Princeton portion in 2004 and 2005. The total program consisted of ten drillholes (plus three wedged and abandoned holes) totaling 11,334 m. The first drilling phase was contracted to Heath and Sherwood (1986) Inc. from Kirkland Lake, Ontario. The contract covered 5,025 m between July 22, 2004 and April 5, 2005 and included drillholes PR-04-08 through PR-04-12, with the tenth hole having a wedged section and an abandoned hole (PR-05-10) that was redrilled as PR-05-10B (Fig. 29).

The second drilling phase was contracted to Benoit Diamond Drilling of Val d'Or, Quebec. The contract overlapped the Heath and Sherwood drilling, extending from March 17 to August 18, 2005. In the second phase, a wedged intersection (PR-04-11A) was attempted on original drillhole PR-04-11, followed by drillholes PR-05-13 through PR-05-17 totaling 6,309 m. Drilling problems were encountered on drillhole PR-05-14, such that the section was subsequently completed by hole PR-05-14B collared 175 feet (53.4 m) further north (Fig. 29).

The core size for both phases of drilling was NQ, although in drillhole PR-05-10, the core was downsized to BQ in an attempt to salvage the drillhole across a section with adverse drilling conditions.

Drillholes were spotted via grid coordinates in the field, supplemented by GPS when field conditions were less than ideal. The core was logged by Queenston personnel using a simple k-edit format, that was subsequently loaded into logii system software – the geological software used.

The Phase I drilling was essentially designed to test carbonate zone targets associated with the Cadillac-Larder Lake Break and the highly deformed stratigraphy around the Tisdale assemblage / Timiskaming assemblage contact at depth. Aside from the first drillhole (PR-04-08 at 462 m), all of the drillholes were planned to be in the order of 1000 m in length. Drillholes PR-05-10, 10W and 10B did not reach the Tisdale / Timiskaming assemblage contact. All three of these holes were lost due to poor drilling conditions.

Given the conflicting historical data on the Ritchie zone, the first drillhole (PR-04-08) was designed to test the Ritchie horizon at a depth of approximately 60 m between two historic holes with mixed results – 1.10 g/t gold over 3.8 m and 0.6 g/t over 3.6 m above (via drillhole 70180 by Canico in 1985), and, 7.9 g/t over 3.8 m plus 2.4 g/t over 1.8 m below (Consolidated Mining and Smelting drillhole C-2 in 1936). Hole PR-04-08 continued northward into a north carbonate environment (the North Break) and ended at 462 m. A deeper intersection on the Ritchie zone was attempted via drillhole PR-04-09.

Hole #	Coordinates (ft)	Dip	From (m)	To (m)	Interval (m)	True Width	Assay (g/t)	Zone Comments
PR-04-08	6800W/400N	-45	86.55	90.55	4.0	3.7	0.6	Ritchie felsite
			111.00	117.00	6.0	5.4	0.2	CLLB
							NSV	North Break
PR-04-09	6800W/950S	-60	499.44	504.26	4.82	4.4	1.1	Ritchie felsite
			532.00	534.00	2.0	1.8	0.6	Ritchie carbonate
			578.00	579.78	1.78	1.6	0.6	CLLB
			738.00	748.89	10.89	9.5	0.2	North Break
PR-05-10	3400W/1100S	-65	644.00	646.00	2.0	0.9	0.5	carbonate above felsite
			715.00	731.00	16.0	8.0	0.6	Felsite
PR-05-10B	3350W/1150S	-65	625.79	729.41			NSV	carbonate above felsite
			731.00	737.00	6.0	3.4	0.6	Felsite
			744.31	784.07	39.76	22.5	0.4	Felsite

Table 20: Princeton Drilling Results, Phase I

	including:		761.00	766.00	5.0	2.8	0.7	Felsite
PR-04-11	850W/400S	-65	507.55	513.60	6.05	3.1	0.6	Altered
								section
			896.00	897.00	1.0	0.7	30.6	Graphitic
PR-04-12	4850W/750S	-52	713.05	715.20	2.15	1.8	0.5	Timiskaming

NSV = no significant values

CLLB = Cadillac-Larder Lake Break

Drillholes PR-04-08 and 09, tested the Ritchie and north carbonate / North Break targets. Assay results were more consistent with the Canico vintage drilling in 1985 than the historical data by Consolidated Mining and Smelting in 1936. The Ritchie felsite zone assayed 0.6 g/t over 3.7 m (hole PR-04-08), and, 1.1 g/t over 4.4 m (PR-04-09). Two carbonate zones noted in drillhole PR-04-09, assayed 0.6 g/t over 1.8 m (Ritchie carbonate), and, 0.6 g/t over 1.6 m in carbonated rocks at the Cadillac-Larder Lake Break contact. Only one carbonate zone was intersected in hole PR-04-08 at the Cadillac-Larder Lake Break assaying 0.2 g/t over 5.4 m.

Drillhole PR-04-12 sectioned the environment around the Victoria shaft in the west central part of the property. Drillholes PR-04-11, and, the series of drillholes PR-05-10, 10W and 10B sectioned the sequence in the eastern part of the property where significant surface exposures of carbonate rocks exist. Hole PR-04-11 (furthest east) discovered a new intersection within graphitic Timiskaming sediments between two intervals of carbonate rocks assaying 30.6 g/t gold over 0.7 m. Holes PR-05-10 and PR-05-10B encountered a broad, mineralized felsic intrusive some 70 m in horizontal thickness within Tisdale assemblage rocks, 50 to 100 m before the Timiskaming contact. This intrusive may be the down-plunge equivalent of the felsic intrusives encountered in hole PR-04-12 below the Victoria shaft. No significant values were encountered in hole PR-04-12, but, the felsic intrusive was mineralized in drillholes PR-05-10 and PR-05-10B, and anomalous in gold content, assaying 0.6 g/t over 8.0 m (PR-05-10), and, 0.4 g/t over 22.5 m, including 0.7 g/t over 2.8 m in hole PR-05-10B. Hole PR-05-10, the chronologically last hole in the program, was drilled in 2005.

Drillholes for both phases of drilling are located on Fig. 29.

The Phase II drilling included priorities to follow up the intersection in drillhole PR-04-11 via a wedge (PR-04-11A), plus some step-out drilling above (PR-05-13), and, east (PR-05-14 and 14B). A larger step out (some 475 m) west of hole PR-04-11 was undertaken by drillhole PR-05-15. Drillhole PR-05-16 was planned to test above the broad felsite unit in holes PR-05-10 and PR-05-10B, and, to section the balance of the stratigraphy in that area. The last hole of the

program (PR-05-17) was designed to section the stratigraphy down plunge of the McBean mineralization.

Hole #	Coordinates (ft)	Dip	From (m)	To (m)	Interval (m)	True Width	Assay (g/t)	Zone Comments
PR-04-11A	850W/400S	-65	501.25	510.00	8.75	4.6	0.3	Altered section
wedge			822.63	823.50	0.87	0.7	1.2	Graphitic
			852.00	853.00	1.0	0.8	6.7	Graphitic
PR-05-13	800W/015S	-63	225.66	258.26			NSV	Altered section
			679.50	681.78	2.28	1.3	0.5	graphitic ?
PR-05-14	400W/075S	-62					NSV	hole lost
PR-05-14B	400W/100N	-62					NSV	graphitic section
PR-05-15	2400W/300S	-62	658.50	662.50	4.0	2.0	0.5	altered sediments
			844.46	847.53	3.07	n/a	0.8	Arsenopyrite zone
	including:		845.50	846.50	1.0	n/a	1.8	
PR-05-16	3400W/650S	-62	317.00	320.00	3.0	1.3	0.6	Carbonate section
	including:		319.00	320.00	1.0	0.4	1.3	
			323.00	324.00	1.0	0.4	2.5	Carbonate
			329.00	330.00	1.0	0.4	3.2	Carbonate
			431.45	444.50	13.05	6.3	1.3	Felsite
	including:		431.45	435.50	4.05	2.0	3.0	
			968.87	975.00	6.13	n/a	0.5	Arsenopyrite zone
PR-05-17	8000W/1600S	-64	386.00	389.30	3.30	n/a	0.4	Aplite section
			499.25	510.00	10.75	n/a	0.6	Aplite section
			518.50	528.00	9.5	n/a	0.5	Aplite section
	including:		519.32	521.94	2.62	n/a	1.3	
			530.00	533.00	3.0	n/a	0.7	Aplite section
			894.00	896.00	2.0	1.3	0.4	McBean type

Table 21: Princeton Drilling Results, Phase II

NSV – no significant values

n/a - insufficient data are available to determine a true width for the interval.

The wedge drillhole (PR-04-11A) successfully intersected the mineralization up-dip of phase I drillhole PR-04-11 (30.6 g/t over 0.7 m), encountering 6.7 g/t over 0.8 m in veined and mineralized graphitic sediments. The step-out drilling, however, was weaker with a best assay of 0.5 g/t over 1.3 m in drillhole PR-05-13. Correlation was partly hampered by the changing dip of the deformation corridor from south to subvertical and locally north in this area.

Drillhole PR-05-15 was a larger step out from hole PR-04-11. It intersected low values (0.5 g/t over 2.0 m) in altered sediments, along with a section hosting arsenopyrite mineralization assaying 0.8 g/t over 3.07 m, including 1.8 g/t over 1.0 m.

Drillhole PR-05-16 was designed to test above the mineralized felsite unit in drillholes PR-05-10 and PR-05-10B, and, continue the section of the stratigraphy to the Cadillac-Larder Lake Break. The mineralized felsite assayed 1.3 g/t over 6.3 m, including 3.0 g/t over 2.0 m, compared against a best assay of 0.7 g/t over 2.8 m in PR-05-10B. Hole PR-05-16 also intersected arsenopyrite mineralization similar to PR-05-15, which assayed 0.5 g/t over 6.13 m.

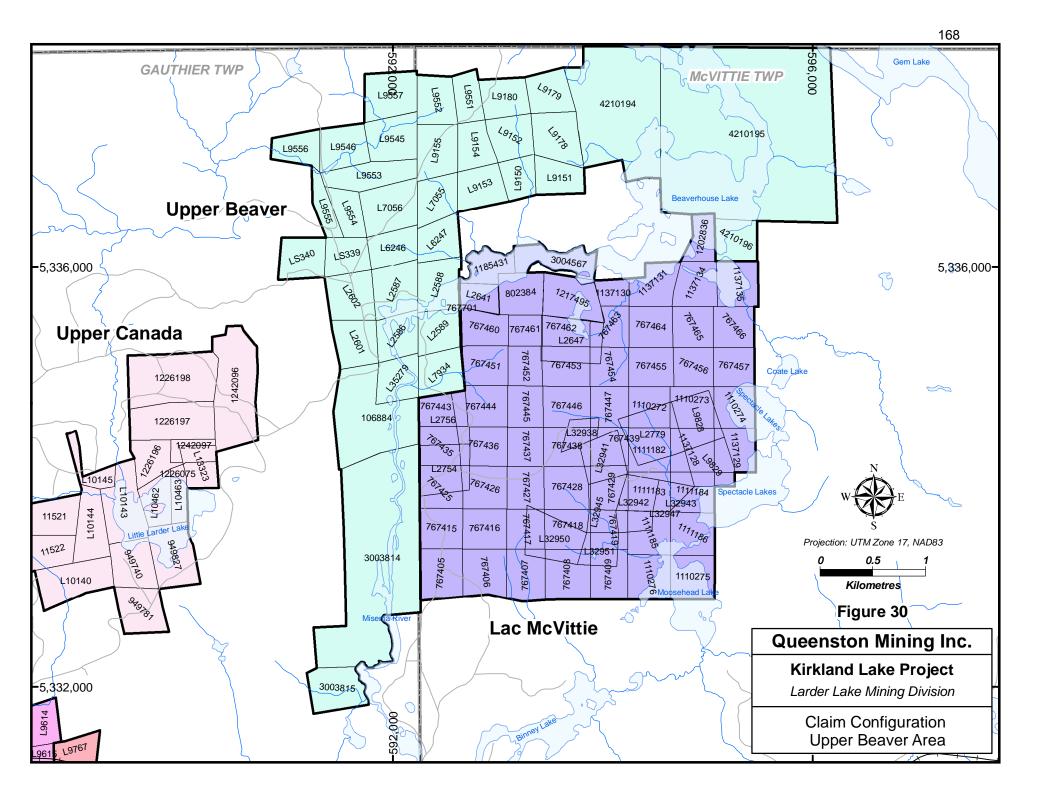
Drillhole PR-05-17, was drilled much further west, testing the stratigraphy down-plunge from the McBean deposit. Aplite dykes were common in the top of the sequence in PR-05-17. They were locally mineralized with pyrite and anomalous in gold content up to 1.3 g/t over 2.62 m. The McBean type mineralization was weak, assaying 0.4 g/t over 1.3 m.

The Princeton deep drilling campaign and follow-up program produced some interesting results in a broad deformation corridor that spans the Tisdale assemblage / Timiskaming assemblage contact. Correlation between the deep drilling and the historical data is hampered by the considerable distances involved (commonly in the order of 500 to 600 m), in addition to the crosscutting nature of the deformation and its associated alteration, and, the presence of numerous felsic intrusives. Nonetheless, assays from the felsite unit in holes PR-05-16 and, to a lesser extent, PR-05-10B, along with the arsenopyrite mineralization in drillholes PR-05-15 and PR-05-16 warrant further consideration. The ingredients of alteration, deformation and mineralization are all present in these areas and further drilling would assist in defining their significance.

# 23.0 UPPER BEAVER PROPERTY

#### 23.1 Description, Location and History:

The Upper Beaver property consists of 72 claim units in northeastern Gauthier Township and northwestern McVittie Township (Fig. 30). Thirty-two claims are patented for mining rights and surface rights, and, three claim units are leased (one lease) for mining rights and surface rights. Sudbury Contact Mines owns diamond rights only on the 35 leased and patented claims.The remaining five unpatented claims contain 37 claim units. The unpatented claims are due to expire between March 2008 and May 2012, but there are sufficient assessment credits to hold the claims for a much longer period. Claim specifics are detailed in Appendix A.



The Upper Beaver property is adjacent to the Lac McVittie claims, but is not contiguous with the Upper Canada, Anoki-McBean or Princeton-Mayfair claim blocks further west and south.

The north, central part of the property is covered by grid lines trending due north, spaced 100 m apart. The grid was established in 2005 and is useable for the current drilling program.

Three shafts are located on the property. The #3 shaft on the west shore of York Lake was the main production shaft. It extends to a depth of 605 ft (184 m), with an internal winze from the 500 to the 1250-ft level. Levels are established at 80, 200, 350 and 500 ft, and, at 125-foot intervals from the 500 level to 1250 ft (381 m). The shaft is capped.

The #1 shaft is located further east, on the east shore of York Lake. It is 102 ft (31 m) deep and water filled. Its perimeter is fenced. Less is known about the #2 shaft. Historic plans show it to be 68 m, south-southwest of the #3 shaft at the northern end of the G vein. The shaft (estimated at 15 m deep) is now incorporated into the G vein open cut, which is backfilled with waste rock.

In addition to the three shafts, two adits dating to 1912-1919 on the H and K veins are present. Both are backfilled. As noted above, an open cut on the G vein was backfilled with mine rock, along with capping of various raises, and, refurbishment of the fencing and timber at the remaining hazards between 2001 and 2004.

The property is readily accessible via the Beaverhouse Lake road, a seasonally maintained gravel road from the community of Dobie to the Beaverhouse Lake landing – a popular water access point for hunters and fishermen. A short branch off the road leads to the Upper Beaver minesite, and, a number of recent logging roads provide further access onto the claims.

The Misema River flows southerly from the York Lake, Beaverhouse Lake area near the east boundary of Gauthier Township. East of the river, the claims are accessible via a second, seasonally maintained road extending north from Highway 66, just east of Fork Lake in McVittie Township.

The patented claims in Gauthier and McVittie townships were recently logged, such that trees remaining are minimal – spruce, fir and poplar having been harvested. Outcrop exposure averages 10-15% from low-lying exposures to more prominent knobs. The topography is hummocky. Relief is in the order of 50 m from lakes, rivers and alder swamps at waterway margins, to higher outcrop knobs with local jack pine. Overburden depths range up to 30 m of clay till.

By maintaining road access, the property can be operated on a year round basis.

Gold was discovered on the property in 1912 by Alfred Beauregard, although some blasting was noted in the #1 shaft area during a Bureau of Mines visit in 1901 (Miller, 1902). The history of the property is summarized as:

**1912-19**: La Mine d'Or Huronia; surface trenching, pitting; 2 shallow shafts #1 to 31 m, and, #2 to 15 m; 2 adits; limited production; 15 ton stamp mill.

**1919-35**:Argonaut Gold Mines (lease); #3 shaft to 520 ft (159 m), with levels at 80, 200, 350 500 ft; winze from 500 to 1250-ft level, with levels at 625, 750, 875, 1000, 1125, 1250 ft; several thousand feet lateral development; 200 tpd mill in 1923; production 1919-20, and, 1923-28. **1935**: Beaverhouse Lake Mines; acquire property; surface exploration (amount unknown), new surface vein discovered south of shaft.

**1937-1939**:Toburn Gold Mines (option manager); underground exploration on 200 and 350-ft levels, in area of new veins.

**1939**: Ventures Ltd. (manager); dewater mine to 500-ft level, 244 m lateral development on 500-ft level; surface (4 holes) and underground diamond drilling (amount unknown).

**1944-47**: Mary Ann Gold Mines; south part of property; geological mapping; 26 drillholes (4 on Lac McVittie property); data are incomplete.

**1950-51**:Toburn Gold Mines; geological and geophysical surveys; 16 drillholes (1,647 m). **1961-62**: Augustus Explorations; surface exploration; workings dewatered; 185 m drifting; 64 underground drillholes (4,517 m).

**1964-72**: Upper Canada Mines (manager), formed Upper Beaver Mines; airborne EM survey and geological mapping (1964); dewater mine to 1250-ft level; deepened #3 shaft to 605 ft (184 m); 6,847 m lateral development; 768 underground drillholes (49,303 m); 7 surface drillholes (1,077 m); production started at 100 tons/day, increased to 750 tons/day; ore milled at Upper Canada mine; geophysical test surveys, magnetometer, self potential and VEM completed over known veins in1966 (with Canico); Turam EM survey, surface drilling of 3 airborne EM anomalies discovered pyrite-pyrrhotite-graphite in felsic volcanics (1967); geophysical test surveys (IP, HLEM, VEM and mag) over the known veins west of No 3 Shaft (1968); geochemical survey (for Hg), surface drillholes 71-1 to 71-4 (1970-71); geochemical survey (whole rock) in 1972; mine closed January 1972.

**1974**: Upper Canada Mines; geophysical surveys (mag, HLEM, VLF) on McVittie claims; 2 surface drillholes (484 m).

**1985**: Queenston Gold Mines; magnetic surveys, detailed surface mapping, rock geochemical survey, limited stripping and re-sampling of known showings.

**1989-1990**: Pamorex Minerals / Queenston Mining joint venture; detailed mapping and sampling; overburden stripping and trenching; geophysical surveys (HLEM and mag); 12 surface drillholes with 2 wedge cuts (6,355 m).

**1991-96**: Beaverhouse Resources (sic Pamorex Minerals) / Queenston Mining joint venture; 17 drillholes (7,528 m) in 1991; IP survey and down-hole EM survey on drillhole 91-9 in 1995; 10 drillholes (3,912 m), also in 1995.

**2000-06**: Queenston Mining; re-acquires 100% interest; 1 drillhole (596 m) in 2000; IP survey in 2005; 74 surface drillholes (49,054 m) in 2005 and 2006.

Past production at the Upper Beaver mine is detailed in two phases by Lovell (1979). Intermittent production between 1913 and 1944 of 38,347 oz gold, plus 1,030,783 pounds of copper from 119,372 t grading 9.99 g/t gold and 0.39% copper is largely attributed to Argonaut Gold Mines between 1919 and 1930. Later production includes 102,362 oz gold with 10,924,529 pounds copper from 407,306 t grading 7.82 g/t gold and 1.22% copper by Upper Canada Mines / Upper

Beaver Mines between 1965 and 1972. The final production record totals 140,709 oz gold, 11,955,312 pounds copper from 526,678 t, grading 8.31 g/t gold and 1.03% copper.

# 23.2 Mineral Resources:

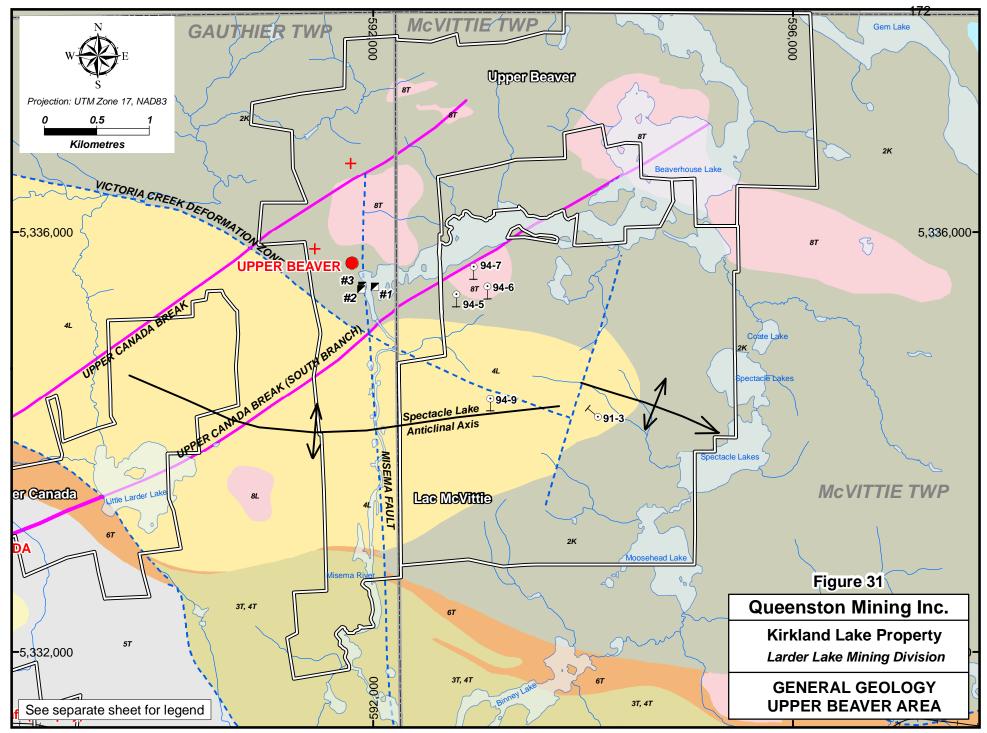
A historic inferred resource was estimated by Cunningham (1974) of 200,000 tons (181,437 t) grading 7.89 g/t gold and 1.2% copper. The estimate includes 68,039 t outlined at the time of closure, and, 113,398 t of an inferred potential resource based on a minimum of 40 untested drill intersections accessible from the mine workings. Cunningham (1977) states that '*the bulk of the resources occur in veins U, X, XW and Y, which lie at the extreme northwesterly end of the mine workings*'. A *'list of the individual blocks that constitute the resource*' are no longer available with the 1974 report. Threads of the calculations are available but the method and supportive data are missing. Thus, it is recommended that the historic resource should not be included in resource estimates, given that it cannot currently be validated.

# 23.3 Property Geology and Mineralization:

The Upper Beaver and Lac McVittie properties are disconnected from the main body of Queenston claims (744 units) that are assembled further south and west primarily along the Cadillac-Larder Lake Break. The Upper Beaver minesite, is 5.5 km north of the Cadillac-Larder Lake Break, and, is north of the Timiskaming basin. Only the southern limits of the Upper Beaver property (about 1200 m) are underlain by Timiskaming assemblage trachyte flows, breccias and agglomerates with a narrow (30-50 m) unit of conglomerate at the north margin of the Timiskaming basin (Fig. 31). Although data are incomplete, carbonated and mineralized zones within the Timiskaming sequence were an exploration target for Mary Ann Gold Mines in 1944-47. Gold values are generally low.

North of the Timiskaming basin are older Tisdale assemblage rocks. Formerly called the Gauthier Group, this package of calc-alkaline felsic to intermediate volcanics has recently been designated Upper Tisdale assemblage via geochronology work by Ayer et al (2005). Ayer (2005) describes the Upper Tisdale assemblage as "*dominated by calc-alkaline felsic to intermediate volcanic rocks including amygdaloidal flows, heterolithic debris flows and volcaniclastic sedimentary rocks*". It conformably overlies the Lower Tisdale assemblage several townships to the northwest, and, is conformably overlain by Lower Blake River assemblage tholeiitic volcanics (Ayer, 2005).

On the Upper Beaver property, the upper contact of the felsic volcanics (Upper Tisdale) is marked by a chert, pyritic tuff and carbonaceous sedimentary horizon overlain by a conglomerate to greywacke and volcaniclastic sedimentary sequence. The sedimentary sequence is subsequently



BCS, October 2007

overlain by massive to pillowed tholeiitic flows of the Lower Blake River assemblage - formerly the Kinojevis Group (Fig. 31). The Lower Blake River assemblage includes iron and magnesiumrich tholeiitic flows and interflow sediments. Flows range from coarse grained and gabbroic textured to massive and pillowed with flow features (including breccias, interflow sediments and hyaloclastite) locally developed. The variation in the iron content of the sequence creates a distinctive magnetic pattern of highs and lows in the regional magnetic surveys.

Structurally, the Upper Tisdale assemblage (the oldest part of the sequence), occurs in the core of an east to east-southeast trending anticline – the Spectacle Lake anticline (Fig. 31). The anticline articulates a southeasterly plunge from a well defined closure eastward on the Lac McVittie lands, but is described as upright and doubly plunging by Jackson and Fyon (1991).

The regional Upper Canada Break trends northeasterly across the northwest part of the property, tentatively traced via magnetics about 900 m northwest of the Upper Beaver #3 shaft (Fig. 31). The South Branch of the Upper Canada Break similarly trends northeasterly in this area and tracks some 400 m south of the shaft. A more subtle, east-southeasterly trending deformation zone occurs in the upper part of the Upper Tisdale assemblage south of the minesite. It is crudely subparallel to the Cadillac-Larder Lake Break and is identified as the Victoria Creek deformation zone – the structure appears to correlate with a deformation zone at the Victoria Creek deposit some 5.5 km west.

The Victoria Creek deposit occurs in calc-alkaline Upper Tisdale assemblage rocks near the contact with Lower Blake River assemblage tholeiitic flows. The rocks are highly foliated subparallel to the stratigraphy. Meyer et al. (1999) describe the mineralization and deformation framework:

"Gold mineralization is mostly confined to three mineralized zones: 4A, 4C and 4D. In these zones, gold mineralization is well defined, and appears to follow hydrothermally altered shear zones controlled by S1 deformation. These zones tend to be well banded on the 350 Level where narrow sericite-chlorite and semi-massive pyrite bands separate strong silicified-albitized bands up to 1.5 cm wide. In the 4A Zone silicification and albitization are well developed and pyrite mineralization tends to occur more commonly in blebs and stringers. The gold zones are enveloped in sericite-carbonate and moderately to weakly silicified and albitized volcanic rocks with minor pyrite blebs and stringers."

'There are two main superimposed structural deformation zones (S1 & S2). The S1 deformation zone, more or less parallel to the stratigraphy, strikes at an azimuth of approximately 080 to 090 degrees and dips 55 to 70 degrees to the north. Strong sericitization, carbonatization, silicification, albitization and gold mineralization are associated with this shear zone. The S2 deformation zone, a penetrative shear zone, strikes at an azimuth of 060 to 070 degrees and dips 30 to 45 degrees to the north-northwest. Banding, caused by S1 deformation, is deformed by S2 deformation into Z style banding with south side up relative to the north side. The youngest

deformation zones (S3), also postdating the gold mineralizing event, are narrow fault zones striking in an easterly direction and dipping to the north.'

The Upper Tisdale host lithologies at the Victoria Creek deposit include felsic to intermediate ash tuffs, lapilli tuffs and coarser fragmental rocks, along with graphitic to carbonaceous units. The rocks are mineralized with pyrite and veined with fine quartz stringers. Alteration minerals include silica, albite, sericite, carbonate and chlorite.

The regional 103 Break is west of the property limits.

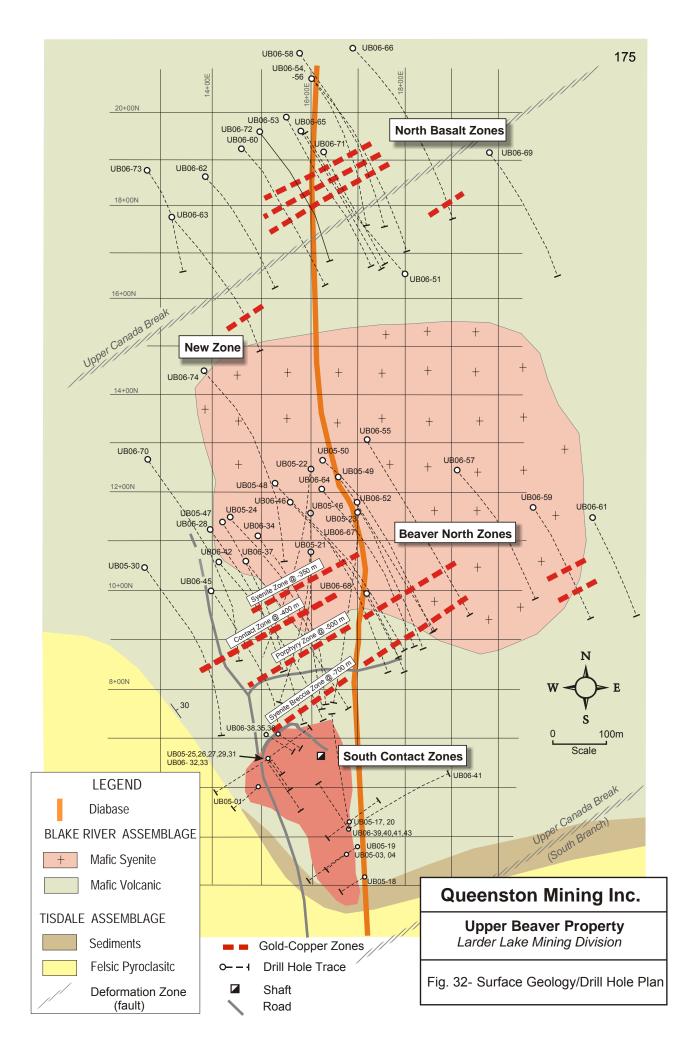
A north-trending cross fault (the Misema Fault) is noted along the Misema River (Fig. 31). Its offset is unclear since both left-handed and right-handed displacements are indicated from past work on the regional stratigraphy and the intrusive rocks. A late, Matachewan diabase dyke follows this structure. The dyke is 30 to 40 m thick, dips steeply west, and, is present in the mine workings. Mineralization is found on both sides of the dyke.

In addition to the faulting and folding, the Upper Beaver sequence is intruded by numerous dykes to plugs of syenite, syenite porphyry, diorite and mafic syenite. The syenite plugs are often contaminated to more mafic compositions at their margins, typical to the Kirkland Lake camp, and, volcanic xenoliths are common. Contact aureoles are variably developed.

A prominent, subovoid plug of syenite and mafic syenite, 600 m in diameter, is encountered 250 to 850 m north of the #3 shaft (Fig. 32). At the time of the mine closing in 1972, the plug was felt to mark the end of ore possibilities. Recent work, however, shows that mineralized fractures and veins crosscut all parts of the stratigraphy except for the diabase dykes. (There is rare, local evidence of remobilization associated with the diabase dykes). Subsidiary faults, fractures and veins are found both subparallel and perpendicular to the regional structures, along with branching to splay elements. East to east-southeast striking faults and fractures dip steeply north, northeast trending fractures dip steeply northwest, and, northwest trending patterns dip steeply northeast.

A second, prominent syenite plug is noted in the far eastern part of the property around Beaverhouse Lake (Fig. 31). It is interpreted to be cut by the South Branch of the Upper Canada Break. The environment is similar to the Upper Beaver area but little is currently known about the geology due to a lack of prior work.

The contact between the Upper Tisdale felsic and Lower Blake River mafic volcanics in the immediate mine area is very complex. It sits between the two regional Upper Canada Breaks,



hanging wall (north) of the Victoria Creek deformation zone, is on the north flank of the Spectacle Lake anticline, and, there is a prominent syenite plug to the north (Fig. 31). To the east of the #3 shaft the contact strikes northeast and dips 30-40 degrees northwest. Southwest of the shaft, the contact strikes northwest and dips 65-70 degrees northeast (Fig.32). The mafic volcanics east, west and north of the syenite plug strike easterly and dip 70-80 degrees to the north.

East of the #3 shaft, the chert marker horizon is overlain by a 100-150 m thick sequence of magnetite-epidote-chloritic altered mafic breccias and volcaniclastic conglomerates. The origin of this unit is uncertain as it may be a debris flow or it may have formed in-situ but it is interpreted to represent the uppermost part of the Upper Tisdale assemblage. Its northwest contact is marked by a sericitic-chloritic deformation zone. The location and orientation of the sericitic-chloritic deformation zone. The location and orientation of the sericitic-chloritic deformation zone.

The complexities of the faulting and folding in the immediate mine area are reflected in the complex geometry of the vein systems. Initial production from the upper levels of the mine focused on a series of north trending (0 degrees), to northeast trending (025 to 055 degrees) veins. More east-northeast trending (055 to 070 degrees) veins are encountered northward and at depth – as the XW vein on the 350-ft level. North trending elements persist into the lower levels of the mine but the east-northeast trending systems are more common below the 500-ft level, particularly below 1000 ft, and, in the recent drilling below the mine workings. The multiple orientations of the veins are suggested to reflect the complex roll in the geology at the Upper Tisdale contact, combined with potential dragfolding related to faulting, and, fracturing / remobilization associated with the north trending Misema cross fault in the mine workings that is filled with diabase.

Cunningham (1977) describes the past production from the vein systems mined as:

'The vein structures are narrow, irregular and discontinuous. They average 0.6 m in width, 30 m in height and rarely exist in lengths of more than 120 m. They exhibit a tendency to terminate abruptly and join with one another. They often exhibit a gently curved outline in plan and section. It is not difficult to visualize that the vein structures are localized along irregular flow contacts. That some 25 veins have been developed and over 60 stopes mined attest to the erratic nature of the ore-bearing structures. The largest stope yielded 23,000 tons (20,865 t) and extended 91.5 m vertically, with a horizontal length of 30.5 m. The zones strike northeasterly and dip northwest at 65 degrees.'

Benham (2006), lists the types of veins previously mined with comments:

'Six types of veins were mined as:

- 1. Chalcopyrite-magnetite veins +/- quartz, calcite, pyrite.
- 2. Quartz-calcite-chalcopyrite veins +/- visible gold, molybdenite, specularite, pyrite.

- 3. Quartz veins +/- molybdenite.
- 4. Calcite veins +/- chalcopyrite, pyrite, specularite, molybdenite, visible gold.
- 5. Quartz-feldspar stringers in basalt.
- 6. Quartz stringers and veins in syenite +/- chalcopyrite.

Roberts (1972) described the chalcopyrite-magnetite mineralization to be of syngenetic origin and to be located along interflow contacts. The mineralized veins are in mafic volcanics from surface to the 1000-foot level and in cherts on the 875 to 1250-foot levels. Older reports, however, describe the veins to be fissures which crosscut all rock types except the diabase dykes. The latter is more probable since the veins are relatively steeply dipping versus the shallow dips of the volcanic stratigraphy.'

The geological setting and the vein geometry are complex. Veining and mineralization locally follow flow contacts or planes of weakness in the stratigraphy but recent work suggests the mineralization to have a more structural than stratigraphic history since the systems crosscut most rock types on the property. The current drilling, below and adjacent to the mine workings subdivides this complex environment into three broad, mineralized corridors: the South Contact Zone, the Beaver North Zones, and, the North Basalt Zones (Fig. 32).

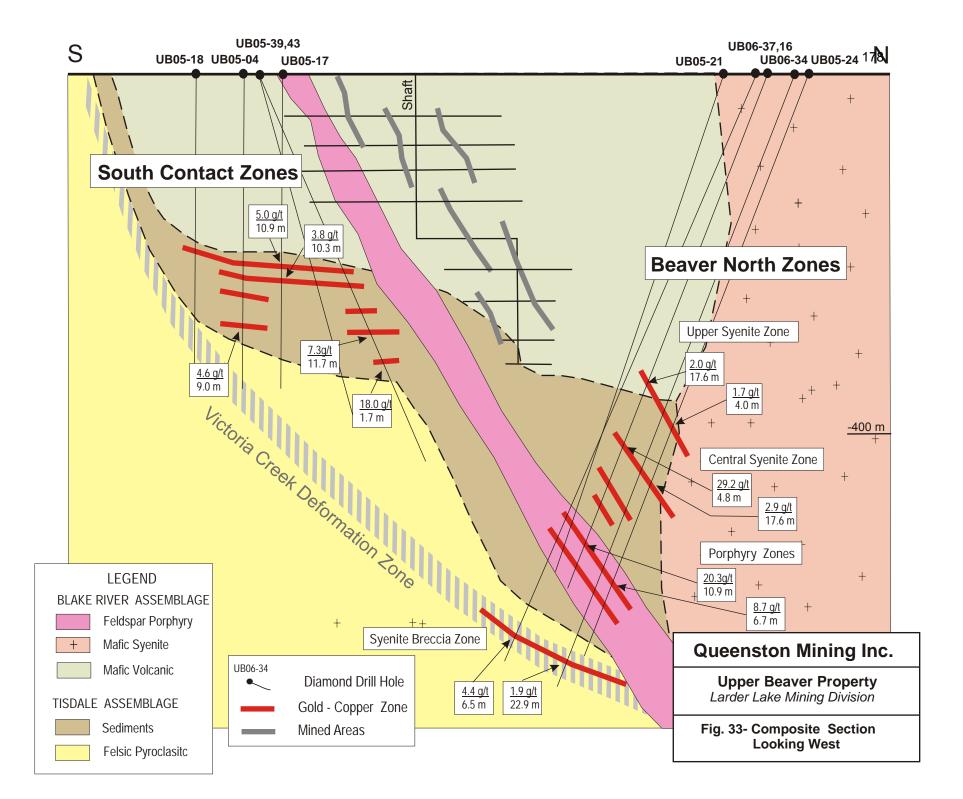
The South Contact Zone mineralization consists of two, relatively flat-lying zones. It occurs below and south of the mine workings in the Upper Tisdale contact area, marked by the roll in the stratigraphy from a northwesterly to northeasterly strike. Some steeper elements are expected but are unclear at this point. The host is mafic breccia and volcaniclastic conglomerate with variable silica, epidote and calcite alteration, along with magnetite, chalcopyrite, pyrite, pyrrhotite, and visible gold. A composite section, highlighting selected intersections follows (Fig. 33). Benham (2006) describes the history of the South Contact zone as:

'Mineralization was intersected in mafic breccias at a depth 145 metres to the southwest of the No. 3 Shaft in hole 91-12 (Beaverhouse Resources) returning an interval of 5.5 g/t Au, 0.41% Cu over 15.4 metres.

In the summer of 2005, Queenston completed seven holes to follow up the 91-12 intersection. The 2005 holes outlined a flat-lying brecciated altered zone with disseminated chalcopyrite-pyritemagnetite sub-parallel to the brecciated base of the basalt and the underlying conglomeratic to volcaniclastic sediments.

3.1 g/t Au, 0.17% Cu over 5.2 metres
4.8 g/t Au, 0.35% Cu over 5.1 metres
1.4 g/t Au, 0.04% Cu over 1.1 metres
14.3 g/t Au, 0.16% Cu over 3.0 metres
4.6 g/t Au, 0.12% Cu over 9.0 metres
2.3 g/t Au, 0.06% Cu over 55.5 metres
13.4 g/t Au, 0.71% Cu over 4.2 metres'

The Beaver North Zones include a series of east-northeast striking, north-dipping, fracture, vein and stringer systems containing chalcopyrite, magnetite, pyrite and visible gold. They occur below and north of the mine workings near the south contact of the large (600 m) syenite plug (Fig. 32).



The fracture systems crosscut a variety of rock types and are tentatively named by their position in the stratigraphy when first identified as: Syenite Zones, North Contact Zone (the basalt / syenite contact area), Porphyry Zones (associated with feldspar porphyry), Syenite Breccia Zones, and, Lower Gauthier Zone (in Upper Tisdale assemblage rocks). The Upper Beaver Property, Composite Section (Fig. 33) highlights selected intersections of the Beaver North Zones. Benham (2006) also tracks the recent history of the Beaver North Zones as:

#### 'North Contact Zones [author's boldface]

The Pamorex / Beaverhouse Resources [/Queenston joint venture] drilling intersected significant widths of copper-gold mineralization in mafic breccias to the west and below the 1250-foot level.

s
s

Drilling by Queenston in 2005 further tested the North Contact Zones.

UB05-06	1.2 g/t Au, 0.16% Cu over 5.0 metres
	7.1 g/t Au, 0.73% Cu over 0.9 metres
UB05-16	8.4 g/t Au, 0.37% Cu over 5.7 metres

### Syenite Zones [author's boldface]

In holes 90-2 and 90-5 to the northwest of the mine workings Pamorex discovered high grade gold mineralization in altered quartz porphyry within the syenite plug.

Hole 90-2	13.0 g/t Au over 7.3 metres
	49.0 g/t Au over 6.5 metres
Hole 90-5	57.9 g/t Au over 2.8 metres
	9.9 g/t Au over 4.0 metres

Queenston drilled one hole in 2005 to test these high grade gold zones

UB05-16 2.0 g/t Au over 17.6 metres 29.2 g/t Au over 4.8 metres

### Porphyry Zones [author's boldface]

Hole UB05-16 drilled by Queenston in 2005 intersected two high grade gold-copper zones below the lowest level of the Upper Beaver Mine in feldspar porphyritic mafic syenites. These two zones are probably the down-dip extensions of the H veins which were previously mined at the Upper Beaver, although they are considerably higher grade and thicker than any of the goldcopper magnetite-chalcopyrite-pyrite-quartz veins mined previously. UB05-16 20.3 g/t Au, 1.99% Cu over 10.9 metres 18.7 g/t Au, 1.06% Cu over 3.7 metres

The North Basalt Zones are located at the north contact of the 600 m, syenite plug (Fig. 32). They are also characterized by a series of fractures and stringers with chalcopyrite and magnetite crosscutting syenite to mafic syenite and basalt. In all, some five zones (lettered A to E) are currently indicated. The fracture systems strike east-northeasterly and dip steeply north. They are primarily found in altered and brecciated basalt. Although no major faulting is indicated, the North Basalt Zones track close to the proposed trace of the regional Upper Canada Break. Benham (2006) further describes the North Basalt environment as:

# 'North Basalt Zones [author's boldface]

In 1991, hole 91-15 was drilled to test for Upper Beaver type veins to the north of the syenite. Four mineralized zones were intersected, three in altered mafic breccias with chalcopyrite and magnetite and one in mafic syenite. In 1995 four holes were drilled to follow-up the 1991 results but significantly lower gold values were encountered. One hole was drilled in 2000 by Queenston to test for an east-west strike of this mineralization. The 2000 drillhole intersected one mineralized zone in mafic breccias with chalcopyrite and magnetite stringers.

Hole 91-15	17.5 g/t Au, 1.09% Cu over 2.0 metres
	5.1 g/t Au, 0.33% Cu over 8.4 metres
	5.5 g/t Au, 1.01% Cu over 18.9 metres
	3.1 g/t Au, 1.60% Cu over 10.7 metres

Hole 00-1 3.6 g/t Au, 0.90% Cu over 2.3 metres

Queenston further tested the North Basalt Zones with three holes in 2005.

UB05-10	0.5g/t Au, 0.10% Cu over 11.5 metres
UB05-13	0.5 g/t Au over 5.3 metres and 8.0 metres
UB05-14	2.5 g/t Au over 7.5 metres'

#### 23.3 Exploration, Drilling and Recommendations:

During 2005 and 2006, some 49,054 m of diamond drilling were completed on the Upper Beaver property. The drilling consisted of three phases: Phase I with 15 drillholes (UB-05-01 to UB-05-15) - 5,913 m , followed by 5 drillholes (UB-05-16 to UB-05-20) - 2,421 m in Phase II, and, 54 drillholes (UB-05-21 to UB-06-74) - 40,720 m in Phase III. Phase I and II were completed between May 5 and August 27, 2005, Phase III extended from September 25, 2005 to November 3, 2006. The drill contractor was Benoit Diamond Drilling of Val d'Or, Quebec. The core size was NQ.

For drillhole locations, refer to Fig. 32.

In preparation for the drilling program, a north-trending grid was established over the north central part of the property by Robert Craig of Rouyn-Noranda, Quebec in the winter of 2005. A frequency domain, Induced Polarization survey was subsequently contracted to Remy Belanger Geophysics from Rouyn-Noranda, Quebec between February and March 2005. The IP survey utilized a V5 phase receiver and an IPT-1, 2 kilowatt transmitter manufactured by Phoenix Geophysics. The configuration was dipole-dipole, with n = 1 to 6, and, 'a' spacings of 25, 50 and 100 m. Pseudosection plots for apparent resistivity, IP phase and metal factor accompany the report.

Nine, weak to moderate IP anomalies are highlighted in the survey, most of which are associated with high resistivity zones. Six anomalies exhibit an easterly strike and reflect variably developed interflow material with or without sulphides, local mineralized shears, and/or mineralized mafic breccia zones in Lower Blake River basalts. Three anomalies strike northwesterly, two of which are moderate to strong. The longest and strongest of the northwest features relatively follows the Upper Tisdale assemblage / Lower Blake River assemblage contact west of the #3 shaft. It appears to be related to altered and mineralized mafic breccia zones common to this interface. The anomaly ends in the approximate area of the South Branch Upper Canada Break. The second strong feature is more limited in extent. It plots directly over the mine workings such that its source is suspect. The third, northwest trending anomaly is much weaker and is located further southwest in Tisdale assemblage rocks. It is a near surface phenomenon, and, the source is unknown.

IP anomalies were the targets for eleven of the drillholes in the first phase of diamond drilling, including holes UB-05-01, UB-05-03, UB-05-05, UB-05-07, UB-05-08, and UB-05-10 to UB-05-15 inclusive.

Diamond drillholes were laid out via grid coordinates in the field, supplemented by GPS. A theoretical drill grid at an azimuth of 325 degrees was used to plan and layout the holes in the phase III drilling, while most of the drillholes in phases I and II were directly oriented to section the IP targets. The core was logged by Queenston personnel onto computer in either an Excel or k-edit format to transport into the geological software – currently standardized with Excel files in Surpac software and 3D modelling in GoCad.

In the first phase of drilling, drillholes UB-05-01, UB-05-03 and UB-05-05, with follow-up holes UB-05-02 and UB-05-04 tested the strongest, northwest-trending, IP feature, encountering altered and mineralized mafic breccia zones. Hole UB-05-01 was also designed to test a gold-copper intersection in Beaverhouse Resources drillhole 91-12 that intersected 5.5 g/t gold, 0.41%

copper over 15.4 m in the South Contact Zone. Drillhole UB-05-01 encountered three mineralized corridors in the South Contact Zone, the most significant being 2.0 g/t over 19.8 m, including two zones of 4.2 g/t 2.2 m, and, 5.4 g/t over 3.4 m. Drillhole UB-05-02 encountered only one zone (1.4 g/t over 1.1 m), while drillholes UB-05-03 and UB-05-04 again encountered three zones, the most significant of which were 14.3 g/t over 3.0 m in UB-05-03, and, 4.6 g/t over 9.0 m, including 9.2 g/t over 4.0 m in hole UB-05-04. No mineralization was attributed to the IP anomaly in drillhole UB-05-05, which tested the most northwesterly part of the anomaly. Not all of the intervals were assayed for copper content. Refer to Fig. 32 for drillhole locations.

Drillholes UB-05-06 through UB-05-09, tested the Beaver North Zone environment. Hole UB-05-06 followed up Syenite Zone mineralization encountered in Pamorex drillholes 90-2 (13.0 g/t over 7.3 m and 49.0 g/t over 6.5 m) and 90-5 (57.9 g/t over 2.8 m and 9.9 g/t over 4.0 m). Results in hole UB-05-06 were weaker, with 3.9 g/t over 1.2 m in the Upper Syenite Zone, and, 4.5 g/t over 1.0 m in the Lower Syenite Zone. The North Contact Zone was also intersected in drillhole UB-05-06 – three intervals were highlighted by a best assay section of 7.1 g/t gold with 0.7% copper over 0.9 m.

Drillholes UB-05-07 and UB-05-08 in the Beaver North Zone environment tested weak, easttrending IP features, and; UB-05-09 sectioned a magnetic anomaly further east. No significant values were intersected in holes UB-05-07 and UB-05-09, but UB-05-08 intersected 0.7 g/t over 8.9 m, including 2.1 g/t over 0.8 m in a mineralized zone related to the IP feature.

Drillholes UB-05-10 to UB-05-15 inclusive, were further north, testing the North Basalt environment and other weak to moderate IP anomalies in the north part of the property. Again, no significant values were attributed to the IP anomalies. The North Basalt Zones were intersected in three of the five holes, with a best result of 2.5 g/t over 7.5 m, including 4.6 g/t over 2.9 m in drillhole UB-05-14.

The first phase of drilling is summarized as:

Hole #	Coordinates	Dip	Az	From	То	Width	Cu	Au	Zone
	(m)			(m)	(m)	(m)	(%)	(g/t)	Comments
UB-05-01	14+85E/600N	-75	228	114.6	119.8	5.2	0.2	2.7	South Contact
	including			115.7	117.8	2.1	0.4	5.9	
				129.8	149.6	19.8	0.1	2.0	South Contact
	including			129.8	132.0	2.2	-	4.2	

Table 22: Upper Beaver Drilling Results, Phase I

	and			136.5	139.9	3.4	0.3	5.4	
	including			138.0	139.9	1.9	0.5	8.5	
				145.0	146.0	1.0	-	7.4	South Contact
UB-05-02	14+85E/600N	-55	228	99.3	100.4	1.1	-	1.4	South Contact
UB-05-03	16+70E/465N	-70	235	155.1	164.8	9.7	-	0.9	South Contact
				172.0	173.0	1.0	-	4.0	South Contact
				214.6	217.6	3.0	0.2	14.3	South Contact
UB-05-04	16+70E/465N	-83	235	212.0	213.9	1.9	0.2	3.5	South Contact
				292.3	301.3	9.0	0.1	4.6	South Contact
	including			297.3	301.3	4.0	0.2	9.2	
				324.4	325.5	1.1	0.1	5.5	South Contact
UB-05-05	12+05E/995N	-70	235					NSV	IP anomaly
UB-05-06	15+00E/1250N	-55	180	177.5	178.7	1.2	-	3.9	Upper Syenite
				477.2	478.2	1.0	0.6	4.5	Lower Syenite
				493.2	494.1	0.9	0.7	7.1	North Contact
				513.3	515.4	2.1	0.9	1.6	North Contact
				530.7	532.0	1.3	0.8	3.3	North Contact
UB-05-07	12+00E/1375N	-55	180					NSV	IP anomaly
UB-05-08	20+95E/1250N	-50	180	512.7	521.6	8.9	0.1	0.7	IP anomaly
	including			514.7	515.5	0.8	0.2	2.1	
UB-05-09	23+00E/1500N	-60	180					NSV	IP anomaly
UB-05-10	20+00E/1850N	-55	180	289.7	301.2	11.5	-	0.5	North Basalt
	including			293.0	294.0	1.0	-	1.3	
UB-05-11	18+10E/2140N	-55	180					NSV	IP anomaly
UB-05-12	19+00E/2350N	-50	190					NSV	IP anomaly
UB-05-13	16+95E/1925N	-55	180	378.7	384.0	5.3	-	0.5	North Basalt
				394.1	402.1	8.0	-	0.5	North Basalt
				451.0	452.0	1.0	-	2.6	North Basalt
UB-05-14	14+00E/1910N	-65	180	349.1	356.6	7.5	-	2.5	North Basalt
	including			349.1	352.0	2.9	-	4.6	
	including								

NSV – no significant values

Phase II drilling followed up the Phase I results in the Beaver North environment and the South Contact Zone. Drillhole UB-05-16 was drilled to follow up drillhole UB-05-06, and, the anomalous zones encountered in Pamorex drillholes 90-2 and 90-5 (Syenite Zone). UB-05-16 encountered

multiple zones of mineralization highlighted by 29.2 g/t over 4.8 m, including 121.6 g/t over 1.0 m in the Syenite Zone (Main); 4.5 g/t over 14.2 m, including 8.4 g/t over 5.7 m in the North Contact Zone, and; 12.5 g/t gold with 1.1% copper over 23.6 m, including 20.3 g/t gold, 2.0% copper over 10.9 m, and, 18.4 g/t gold, 1.1% copper over 3.7 m in the Porphyry Zone. Hole UB-05-16 was a catalyst for the phase III drill program.

The remaining four holes in the second phase (UB-05-17 to UB-05-20 inclusive) returned to the South Contact Zone environment tested by drillholes UB-05-01 to UB-05-05, and, historic drillhole 91-12. Best assays in the South Contact Zone were 13.4 g/t over 4.2 m, including 41.2 g/t over 1.3 m in hole UB-05-19, and; 2.6 g/t over 43.9 m, including 5.0 g/t over 10.9 m, and 3.8 g/t over 10.3 m in UB-05-17.

Phase II results are summarized as:

Hole #	Coordinates	Dip	Az	From	То	Width	Cu	Au	Zone
	(m)			(m)	(m)	(m)	(%)	(g/t)	Comments
UB-05-16	16+00E/1170N	-65	180	319.4	337.0	17.6	-	2.0	Upper Syenite
	including			319.4	328.5	9.1	-	2.8	
	including			327.5	328.5	1.0	-	8.4	
				343.0	356.0	13.0	-	2.0	Upper Syenite
	including			344.0	348.6	4.6	-	4.5	
				444.0	448.8	4.8	-	29.2	Main Syenite
	including			445.8	446.8	1.0	-	121.6	
				530.5	538.8	8.3	-	2.7	North Contact
	including			535.5	536.4	0.9	-	15.1	
				567.0	581.2	14.2	-	4.5	North Contact
	including			567.0	572.7	5.7	-	8.4	
				621.0	644.6	23.6	1.1	12.5	Porphyry
	including			621.0	631.9	10.9	2.0	20.3	
	and			640.9	644.6	3.7	1.1	18.4	
UB-05-17	16+77E/529N	-85	235	193.1	237.0	43.9	-	2.6	South Contact
	including			193.1	204.0	10.9	-	5.0	
	and			220.0	230.3	10.3	-	3.8	
				246.3	248.6	2.3	-	3.0	South Contact

Table 23: Upper Beaver Drilling Results, Phase II

UB-05-18	17+07E/415N	-85	235	170.0	179.0	9.0	-	0.3	South Contact
				247.7	253.2	5.5	-	0.9	South Contact
UB-05-19	16+94E/478N	-85	235	241.0	245.2	4.2	0.7	13.4	South Contact
	including			241.9	243.2	1.3	1.9	41.2	
UB-05-20	16+78E/531N	-69	50	312.3	313.3	1.0	-	0.7	South Contact

Phase III diamond drilling consisted of 54 drillholes (40,720 m). It was initiated to further define the significant mineralization encountered in the first two phases of drilling. Drilling focused on three main corridors of mineralization, the South Contact, Beaver North and North Basalt environments. The drilling began to define the multiple zones in each of these mineralized corridors, particularly in the Beaver North environment. Use of the theoretical drill grid became more critical in Phase III as the orientations of the mineralization became better known.

Benham (2006) summarizes the Phase III drilling as:

'The 2005-2006 Upper Beaver drilling intersected several anomalous gold +/- copper zones.

Highlights of the drilling program were:

The steeply northwest dipping Upper and Lower Porphyry Zones were traced for a strike length of 400 metres and a dip length of 250 m between the -400 m and the -650 m levels.

The flat-lying Upper, Middle and Lower South zones were intersected over an area of 100-300 m by 250-300 m below the -500 foot (-152m) level in the No. 3 Shaft area.

Several anomalous gold zones were intersected in the North Contact and Syenite Zones.

Two new zones, the Lower Gauthier and Syenite Breccia Zones were discovered 150 m and 250 m to the south of the Porphyry Zones.

High grade but erratic gold-copper mineralization was intersected in the North Basalt Zones.'

The 54 drillholes in the phase III program include 13 drillholes in the South Contact Zone environment (UB-05-25 to UB-05-27, UB-05-31 to UB-05-33, UB-06-35, UB-06-36, UB-06-38 to UB-06-41, and UB-06-43); 13 drillholes in the North Basalt environment (UB-06-51, UB-06-53, UB-06-54, UB-06-56, UB-06-58, UB-06-60, UB-06-62, UB-06-63, UB-06-65, UB-06-66, and, UB-06-71 to UB-06-73, and; the balance of 28 drillholes in the Beaver North corridor.

While voluminous to summarize, highlights include

: South Contact Zone - 4.2 g/t over 11.1 m, including including 8.2 g/t over 4.1 m, and, 10.6 g/t over 1.0 m in drillhole UB-05-27, and; 7.3 g/t over 11.7 m, including 24.2 g/t over 2.9 m in UB-06-43.

: Beaver North environment intersections of Main Syenite Zone – 5.5 g/t gold, 0.7% copper over 5.0 m, including 11.2 g/t gold 0.7% copper over 2.0 m in drillhole UB-06-47; North Contact Zone – 5.9 g/t over 9.0 m, including 8.9 g/t over 5.6 m in drillhole UB-05-21; Upper Porphyry Zone - 47.9 g/t gold, 6.4% copper over 8.0 m, including 82.5 g/t gold, 11.2% copper over 4.3 m, and, 32.1 g/t gold, 2.4% copper over 0.8 m in drillhole UB-05-29; Lower Porphyry Zone – 9.2 g/t gold, 0.4% copper over 5.0 m in drillhole UB-06-47; Syenite Breccia Zone – 6.7 g/t gold, 2.2% copper over 3.0 m in hole UB-06-67, and; Lower Gauthier Zone – 4.7 g/t over 2.0 m in hole UB-05-23. : North Basalt Zone intersections of 1.9 g/t over 16.0 m, including 8.4 g/t over 2.3 m in North Basalt Zone B, drillhole UB-06-60, followed by 4.5 g/t over 11.5 m, including 11.3 g/t over 4.2 m in North Basalt Zone A in the same drillhole.

A new zone was also intersected west of the North Basalt zones in sheared and brecciated syenite, assaying 20.8 g/t over 4.0 m, including 75.6 g/t over 1.0 m, in drillhole UB-06-63.

The Phase III drilling is tabulated as:

Hole #	Coordinates	Dip	Az	From	То	Width	Cu	Au	Zone
	(m)			(m)	(m)	(m)	(%)	(g/t)	Comments
UB-05-21	16+00E/1090N	-65	180	361.6	373.1	11.5	-	2.5	Main Syenite
	including			369.1	373.1	4.0	-	5.0	
				427.2	436.2	9.0	-	5.9	North Contact
	including			428.4	434.0	5.6	-	8.9	
				456.0	457.0	1.0	-	10.7	North Contact
				553.5	558.3	4.8	2.4	8.1	Porphyry
	including			554.5	556.2	1.7	5.9	19.2	
				735.6	736.3	0.7	2.5	50.1	Lower Gauthier
UB-05-22	16+00E/1270N	-65	180	673.7	687.5	13.8	-	1.1	North Contact
	including			673.7	676.1	2.4	-	3.2	
UB-05-23	17+00E/1270N	-65	180	341.7	342.8	1.1	-	5.1	Main Syenite
				363.4	384.8	21.4	-	4.8	Main Syenite
	including			363.4	369.0	5.6	-	15.8	

				516.7	518.4	1.7	0.7	25.8	Porphyry
				743.6	745.6	2.0	-	4.7	Lower Gauthier
UB-05-24	14+32E/1152N	-65	135	402.9	406.9	4.0	-	1.7	Main Syenite
				490.3	507.9	17.6	-	2.9	North Contact
	including			490.3	492.4	2.1	-	10.5	
				679.3	702.6	23.3	0.2	3.2	Porphyry
	including			679.3	686.0	6.7	0.4	8.7	
UB-05-25	15+10E/659N	-62	145	193.0	195.3	2.3	-	2.0	South Contact
				235.8	241.1	5.3	-	0.6	South Contact
UB-05-26	15+10E/659N	-70	145	150.8	163.3	12.5	-	1.7	South Contact
	including			153.0	154.0	1.0	-	6.1	
UB-05-27	15+10E/659N	-82	145	163.9	175.0	11.1	-	4.2	South Contact
	including			163.9	168.0	4.1	1.6	8.2	
	and			174.0	175.0	1.0	-	10.6	
UB-05-28	13+91E/1124N	-67	135	425.0	482.3	57.3	0.8	0.8	Main Syenite
	including			426.9	430.6	3.7	5.3	1.5	
	and			476.0	482.3	6.3	2.8	3.0	
				530.8	546.7	15.9	0.2	1.2	North Contact
				713.4	714.0	0.6	3.1	54.1	North Contact
UB-05-29	15+10E/659N	-62	055	188.8	196.8	8.0	6.4	47.9	Upper Porphyry
	including			188.8	193.1	4.3	11.2	82.5	
	and			196.0	196.8	0.8	2.4	32.1	
UB-05-30	12+60E/1034N	-65	140	157.3	169.7	12.4	0.1	1.2	Unnamed zone
				177.0	177.8	0.8	2.1	8.8	Unnamed zone
				444.6	450.7	6.1	-	2.2	North Contact
UB-05-31	15+10E/659N	-72	055	187.5	194.7	7.2	-	0.6	South Contact
				225.9	227.2	1.3	-	5.8	South Contact
UB-05-32	15+10E/659N	-45	235	142.1	144.7	2.6	-	5.2	South Contact
UB-05-33	15+10E/659N	-62	235	169.1	170.3	1.2	-	3.9	South Contact
UB-06-34	14+87E/1116N	-66	140	446.4	457.5	11.1	-	1.8	Main Syenite
				512.6	519.5	6.9	-	2.6	North Contact
				528.9	549.7	20.8	0.1	2.0	North Contact
	including			538.6	539.8	1.2	0.2	9.5	North Contact
	<b>_</b>			561.3	566.7	5.4	0.4	2.8	North Contact
	including			562.3	563.3	1.0	1.8	9.9	North Contact
	<b>_</b>			617.9	619.5	1.6	_	2.5	Upper Porphyry
				873.0	895.9	22.9	-	1.9	Syenite Breccia
	including			882.8	885.9	3.1	-	6.2	Syenite Breccia

UB-06-35	16+44E/623N	-75	122	7.3	8.5	1.2	-	12.5	South Contact
				167.7	168.7	1.0	1.4	5.3	South Contact
				190.8	192.0	1.2	-	7.6	South Contact
UB-06-36	16+44E/623N	-88	122	10.1	10.7	0.6	-	26.5	South Contact
				237.5	238.8	1.3	-	5.2	South Contact
UB-06-37	14+69E/1056N	-66	140	263.9	274.6	10.7	-	1.6	Upper Syenite
	including			274.0	274.6	0.6	-	14.0	Upper Syenite
				381.0	408.9	27.9	-	0.9	Main Syenite
				440.7	460.9	20.2	-	1.3	North Contact
				546.5	559.0	12.5	0.4	2.9	Upper Porphyry
	including			555.0	559.0	4.0	0.4	5.7	Upper Porphyry
				573.1	577.0	3.9	0.3	4.1	Lower Porphyry
				820.9	837.1	16.2	-	2.3	Syenite Breccia
	including			820.9	823.6	2.7	-	9.9	Syenite Breccia
UB-06-38	16+17E/622N	-74	126	47.0	48.1	1.1	-	5.5	South Contact
				55.2	55.8	0.6	2.5	0.1	South Contact
				182.8	183.7	0.9	0.2	4.6	South Contact
UB-06-39	16+80E/521N	-70	325	188.5	189.5	1.0	-	9.0	South Contact
				195.5	223.5	28.0	-	1.7	South Contact
	including			205.0	209.0	4.0	-	3.2	South Contact
	and			221.8	222.5	0.7	-	24.5	South Contact
UB-06-40	16+80E/521N	-58	325	154.2	161.5	7.3	0.2	1.5	South Contact
				160.2	161.5	1.3	-	5.8	South Contact
UB-06-41	16+80E/521N	-45	055					NSV	South Contact
UB-06-42	13+99E/1069N	-65	140	462.0	465.0	3.0	2.2	4.1	North Contact
	including			462.0	463.0	1.0	5.9	10.3	North Contact
				567.5	583.1	15.6	1.8	6.9	Upper Porphyry
	including			578.2	583.0	4.8	5.4	19.6	Upper Porphyry
				595.9	597.3	1.4	2.0	3.3	Lower Porphyry
				615.0	616.1	1.1	5.9	4.5	Lower Gauthier
UB-06-43	16+80E/521N	-60	344	210.5	240.0	29.5	0.1	1.3	South Contact
	including			215.0	220.2	5.2	0.2	2.8	South Contact
	and			232.1	237.2	5.1	-	2.8	South Contact
				248.1	270.0	21.9	0.1	0.7	South Contact
				283.2	294.9	11.7	0.2	7.3	South Contact
	including			292.0	294.9	2.9	0.3	24.2	South Contact
				347.0	349.4	1.7	-	18.0	South Contact

UB-06-44	17+66E/942N	-57	140	299.4	300.4	1.0	-	6.7	Porphyry
UB-06-45	13+87E/999N	-65	140	217.0	236.9	19.9	0.3	2.7	New
	including			217.0	220.0	3.0	0.7	10.1	New
				336.5	439.5	103.0	0.2	0.6	North Contact
	including			415.0	435.5	20.5	0.4	1.1	North Contact
				543.0	544.5	1.5	0.2	6.3	Upper Porphyry
				564.0	565.0	1.0	1.0	5.9	Lower Porphyry
UB-06-46	15+64E/1184N	-66	140	537.9	547.6	9.7	0.4	17.5	Upper Porphyry
	including			542.4	547.6	5.2	0.7	27.6	Upper Porphyry
	9			768.2	776.0	7.8	0.9	3.9	Syenite Breccia
	including			768.2	770.5	2.3	0.3	12.9	Syenite Breccia
	and			773.4	776.0	2.6	2.3	0.6	Syenite Breccia
UB-06-47	14+11E/1138N	-65	140	416.0	421.0	5.0	0.7	5.5	Main Syenite
	including			416.0	418.0	2.0	0.7	11.2	Main Syenite
				652.0	682.5	30.5	0.3	2.8	Porphyry
	including			652.0	656.0	4.0	0.4	5.6	Upper Porphyry
	and			677.5	682.5	5.0	0.4	9.2	Lower Porphyry
				899.3	907.0	7.7	-	1.5	Syenite Breccia
UB-06-48	15+24E/1222N	-65	140	652.1	654.4	2.3	0.1	7.2	Upper Porphyry
				788.7	789.3	0.6	1.2	20.4	Syenite Breccia
				807.5	808.3	0.8	-	7.0	Syenite Breccia
UB-06-49	16+59E/1244N	-65	140	538.5	549.2	10.7	0.3	4.5	Upper Porphyry
	Including			543.0	547.1	4.1	0.5	7.4	Upper Porphyry
				730.0	755.5	25.5	0.7	0.6	Syenite Breccia
	Including			739.0	744.0	5.0	2.4	1.7	Syenite Breccia
UB-06-50	16+32E/1290N	-65	140	547.3	548.3	1.0	-	3.5	North Contact
				673.6	674.3	0.7	-	27.4	Upper Porphyry
				828.2	829.5	1.3	-	3.6	Syenite Breccia
UB-06-51	18+04E/1635N	-65	320	451.2	461.1	9.9	1.3	6.2	North Basalt - A
				593.2	608.3	15.1	0.6	5.1	North Basalt - B
UB-06-52	17+00E/1175N	-63	140	430.9	436.9	6.0	-	1.0	Lower Syenite
				454.4	457.5	3.1	0.1	5.0	Porphyry
				704.0	712.0	8.0	-	0.6	Syenite Breccia
UB-06-53	15+58E/1998N	-69	145	334.0	337.1	3.1	2.3	13.2	North Basalt-C
	including			335.0	336.0	1.0	6.2	38.6	North Basalt-C
		L		406.6	409.7	3.1	1.0	2.9	North Basalt-B
	including			406.6	407.6	1.0	1.8	8.3	North Basalt-B
UB-06-54	16+00E/2120N	-67	145	564.8	572.9	8.1	0.1	1.2	North Basalt-B
				646.4	661.0	14.6	0.7	3.1	North Basalt-A

	including			646.4	652.0	5.6	1.5	7.1	North Basalt-A
UB-06-55	17+39E/1308N	-65	140	811.0	812.0	1.0	-	1.3	Porphyry
				871.0	894.5	23.5	-	0.5	Syenite Breccia
UB-06-56	16+00E/2120N	-61	141	456.0	462.0	6.0	0.6	2.4	North Basalt-C
	including			456.0	458.0	2.0	1.8	6.5	North Basalt-C
				493.7	494.6	0.9	0.1	6.0	North Basalt-B
UB-06-57	19+15E/1232N	-65	138					NSV	Porphyry
UB-06-58	15+34E/2165N	-67	135					NSV	North Basalt
UB-06-59	20+75E/1170N	-65	143	474.0	475.0	1.0	-	9.9	Porphyry
				566.0	571.0	5.0	-	1.2	Syenite Breccia
UB-06-60	14+78E/1944N	-67	140	378.6	394.6	16.0	0.1	1.9	North Basalt-B
	including			381.9	384.2	2.3	0.3	8.4	North Basalt-B
				455.0	466.5	11.5	0.3	4.5	North Basalt-A
	including			457.1	461.3	4.2	0.7	11.3	North Basalt-A
UB-06-61	22+20E/1140N	-67	140					NSV	Porphyry
UB-06-62	13+94E/1888N							NSV	North Basalt
UB-06-63	13+30E/1806N	-67	140	677.0	681.0	4.0	-	20.8	NEW
	including			677.0	678.0	1.0	-	75.6	NEW
UB-06-64	16+16E/1216N	-63	136	535.7	549.0	13.3	0.2	3.2	Porphyry
	including			542.0	543.0	1.0	-	11.5	Porphyry
				667.0	673.3	6.3	0.4	1.4	Syenite Breccia
UB-06-65	16+00E/1942N	-66	138	510.4	518.4	8.0	0.2	1.5	North Basalt-D
	including			510.4	511.6	1.2	1.1	4.6	North Basalt-D
UB-06-66	16+85E/2172N	-67	138	701.2	702.1	0.9	-	1.6	North Basalt D
				877.3	878.2	0.9	-	7.3	NEW
UB-06-67	16+38E/1102N	-65	139	405.0	443.0	38.0	0.3	2.2	Porphyry
	including			434.4	438.8	4.4	0.7	8.1	Lower Porphyry
				637.0	640.0	3.0	2.2	6.7	Syenite Breccia
UB-06-68	17+12E/1000N	-65	140	261.0	308.0	47.0	0.1	2.0	Upper Porphyry
	including			298.0	303.0	5.0	0.2	8.2	
				327.2	331.0	3.8	1.5	5.7	Lower Porphyry
				411.0	414.0	3.0	-	26.8	Syenite Breccia
UB-06-69	19+60E/1952N	-66	138	412.6	416.7	4.1	0.1	0.3	Unknown
				490.4	492.0	1.6	-	1.0	Unknown
				658.8	659.7	0.9	-	1.4	Unknown
UB-06-70	12+14E/1272N	-70	133	506.7	509.7	3.0	0.4	1.8	Central Syenite
				626.5	636.1	9.6	-	3.2	North Contact

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	including			626.5	627.5	1.0	-	14.5	North Contact
	and			632.5	634.8	2.3	-	5.5	North contact
				680.3	682.3	2.0	-	1.0	North Contact
				966.0	967.0	1.0	-	3.0	Upper Porphyry
				976.0	978.0	2.0	-	1.3	Lower Porphyry
UB-06-71	16+26E/1904N	-66	140	321.0	325.0	4.0	0.2	8.0	North Basalt-A
	including			321.9	323.0	1.1	0.4	25.7	North Basalt-A
				377.6	385.4	7.8	0.2	1.1	North Basalt-E
				473.9	475.0	1.1	0.7	3.4	North Basalt-D
UB-06-72	15+05E/1995N	-70	140	339.5	341.5	2.0	1.1	4.8	North Basalt-D
				415.9	417.9	2.0	0.5	2.4	North Basalt-C
				458.0	471.2	13.2	0.3	1.7	North Basalt-B
	including			460.0	461.0	1.0	0.5	4.0	North Basalt-B
				511.4	512.3	0.9	1.1	3.8	North Basalt-A
UB-06-73	12+54E/1900N	-67	145	430.0	432.4	2.4	0.2	0.3	Unknown
UB-06-74	13+88E/1464N	-69	137	766.8	769.3	2.5	-	2.0	Upper Syenite
				853.0	855.0	2.0	0.4	7.5	North Contact

True widths are not shown on the above tables. That reflects the complexity of the geological setting, the differing orientations of the early drilling, and, a priority to establish the strike extents of the mineralization, such that insufficient data are available in the dip dimension to define a true width. As a rule of thumb, the more steeply dipping zones in the Beaver North and North Basalt Zones are estimated to have a true width factor of 70 to 77% of the core length interval, while the more flatly dipping South Contact mineralization ranges from 90 to 100% of the original intersection.

Drillhole intersections are also reported uncut.

In-house recommendations are to further delineate the mineralization via a definition drilling program in preparation for an independent resource calculation to NI 43-101 standards. A more exploration component of the drilling should also be allocated to test the possible trace of the South Branch Upper Canada Break, south and east of the #3 shaft area. Currently, a 44,000 m program of definition drilling is underway on the property.

### 24.0 LAC McVITTIE PROPERTY

### 24.1 Description, Location and History:

The Lac McVittie property consists of 61 unpatented mining claims in the western part of McVittie Township (Fig. 30). The property is a joint venture between Queenston Mining (41%), Barrick Gold Corp (49%), and, Sudbury Contact Mines (10%). The diamond rights are owned 51% by Sudbury Contact Mines and 49% by Barrick Gold Corp. The claims are contiguous with the Upper Beaver property (west and north) which is owned 100% by Queenston Mining. Claim specifics are detailed in Appendix A.

A north-trending grid was last established in 1990 over the northwest part of the property, with a cross grid cut over the Spectacle Lake antiformal structure. This grid has seriously deteriorated and is no longer useable.

The property is readily accessible via a seasonally maintained road extending north from Highway 66, just east of Fork Lake in the southwest corner of McVittie Township. Several trails, drill roads and bush roads provide additional access to area lakes, and, the more easterly parts of the claim group.

The terrain is variable from relatively flat sand plains to hummocky, low-lying outcrop exposures with occasional prominent ridges, to swamps and bogs that lead to creeks and the many lakes in the area. Bedrock exposure averages 10-15% in the eastern third of the claims with an average of less than 5% elsewhere on the property. Vegetation is mixed with jack pine, poplar and birch on the higher ground, more spruce and fir on the middle elevations, and, spruce to larch and alder swamps plus bogs in the low-lying areas or adjacent to waterways. Overall relief is in the order of 60 m.

While the history of the Upper Beaver mine dates to the earliest days of the Kirkland Lake gold camp, most of the early focus in McVittie Township was further south along the Cadillac-Larder Lake Break. The history of the Lac McVittie claims is summarized as:

**1938-41**: Spectacle Larder Lake Mines; east part of claims; surface trenching and diamond drilling (amount unknown).

**1944-47**: Mary Ann Gold Mines; southern claims; geological mapping, 4 drillholes (data are incomplete).

**1960-62**: Joy, W.C.; 5 shallow drillholes (176 m) on north part of property.

**1967-79**: Upper Canada Mines; magnetometer and EM surveys; 2 drillholes (1967); further geophysical surveys (mag, HLEM and VLF-EM) in 1974.

**1980**: Queenston Gold Mines; geophysical surveys (magnetics and EM); 8 drillholes (1,072 m). **1985-88**: Lac Minerals; airborne mag and VLF-EM surveys, geological mapping; 8 drillholes (1,416 m).

**1989-91**: Pamorex Minerals (joint venture formed); ground magnetic and HLEM surveys; overburden stripping and trenching; 6 drillholes (1,576 m).

**1993-94**: Sudbury Contact Mines; ground magnetic and IP surveys, geological mapping; reverse circulation drilling – 22 holes; 5 holes diamond drilling (631 m).

**1994-96**: Royal Oak Mines (sic Pamorex Minerals); IP survey; 5 drillholes (1,632 m) in 1994; linecutting, mapping, sampling and 19.7-km Spectral IP survey (1996).

**1996-2006**: joint venture with Queenston, Barrick Gold and Sudbury Contact Mines; no new work undertaken.

There is no past production recorded on the property, and, no mineral resources are currently developed.

### 24.2 Property Geology and Mineralization:

The Lac McVittie property is adjacent to and along strike of the Upper Beaver property stratigraphy but it has not achieved the same results to date. The sequence includes the Upper Tisdale assemblage calc-alkaline, intermediate to felsic volcanics, overlain by the Lower Blake River magnesium and iron-rich tholeiitic flows. The Lac McVittie property is north of the Timiskaming assemblage basin (Fig. 31).

As on the Upper Beaver property, the upper reaches of the Upper Tisdale assemblage are characterized by tuffs, breccias, heterolithic debris flows and volcaniclastic sedimentary rocks along with units of chert and graphitic sediments. The Lower Blake River assemblage varies from coarse grained, dioritic to gabbroic textured flows, to finer grained, massive to pillowed units with sections of flow breccia, interflow sediments and hyaloclastite. The sequence is also cut by dykes to plugs of syenite and syenite porphyry as well as late stage, Matachewan diabase dykes.

The most prominent feature in the stratigraphy is the Spectacle Lake anticline, the axis of which strikes east-southeasterly from the Upper Beaver property (Fig. 31). The core of the anticline contains the older Upper Tisdale assemblage rocks. Closure of the structure is well defined at the top of the Upper Tisdale assemblage in the east-central part of the property, and, in the Lower Blake River assemblage, east of the property limits. The closure articulates a southeasterly plunge, although Jackson and Fyon (1991) describe the antiform in a more regional context as upright and doubly plunging.

The relationship between the regional breaks is less clear on the Lac McVittie lands. The South Branch of the Upper Canada Break is interpreted to track along the far northwestern corner of the

claims but physical evidence is lacking. A large number of altered and mineralized zones are noted in three holes in the northwest corner of the property by Royal Oak Mines (drillholes 94-5 to 94-7 inclusive – Fig. 31) but no specific faulting was indicated (Pressacco, 1994). The Victoria Creek Deformation Zone, however, appears to maintain an east-southeasterly strike from the Upper Beaver property and is suggested to be represented by a strong fault gouge over 20 ft (6.1 m) near the top of drillhole 94-9 in the west-central part of the property (Fig. 31). No anomalous gold was associated with the faulting.

The Upper Canada Break is north and west of the property limits, and, the Cadillac-Larder Lake Break is roughly 2.5 km south of the southern boundary of the claims.

A north-northeast trending cross fault is noted in the east central part of the property. It has a suggested left-handed, lateral displacement of 225 to 275 m of the Upper Tisdale assemblage near the closure of the antiformal structure. One drillhole by Pamorex in 1991 (91-03) did not reach the structure but encountered 0.96 g/t gold over 5.64 m from a composite sample at the very end of the drillhole (Fig. 31). [A composite sample is described in the report as a 2 cm to 10 cm, representative sample of whole core at a nominal 1.5 m spacing along a geological interval – the largest composite sample noted is 24 m in size.] This area was not revisited.

Past exploration on the property has been largely guided by conventional geophysics, particularly electromagnetics. The presence of felsic volcanics in the Upper Tisdale assemblage, graphitic units, and, chalcopyrite mineralization on the adjacent Upper Beaver property continues to suggest the possibility of volcanogenic, massive sulphide deposits. To date, conductors are most often related to graphitic interflow units with or without a strong sulphide component (normally pyrite). Gold values tend to be low. Several drillholes test the Upper Tisdale assemblage at the closure of the Spectacle Lake anticline. A best assay of 3 g/t over 1.5 m is found in a historic Queenston drillhole but gold (and base metal) values in the balance of the drilling in this area are generally low.

One reverse circulation drillhole by Sudbury Contact Mines in the south-central part of the property encountered 93 gold grains in the heavy mineral concentrate from a bouldery, sandy till. Hubacheck (1993) reported that:

"Apparently, the gold was torn by the drill bit from mineralized fractures in rock (either bedrock or a boulder); therefore the anomaly is largely artificial and may be of no exploration significance (Averill, S., 1993)."

Reverse circulation drillhole results in the balance of the program were weak.

A best assay of 3.36 g/t gold over 0.61 m in Royal Oak drillhole 94-6 was associated with a semimassive pyrite section hosted by mafic fragmental in the northwest corner of the property. Immediately adjacent gold values were minimal. As indicated above, Pressacco (1994) reported a large number of altered and mineralized zones in three holes (94-5 to 94-7 inclusive) in this area. The relationship of the mineralization to a small syenite plug, and, the interpreted trace of the South Branch Upper Canada Break (Fig. 31) is unclear. The historic map of McVittie Township (Thomson, 1941) shows a small syenite plug in this location. Pressacco (1994) describes an unusual assemblage of rocks:

"The three holes drilled to test magnetic-HEM anomalies in the northwest corner of the property (holes LM94-5, 94-6 and 94-7) intersected a number of different styles of alteration and mineralization. These included zones of pervasive sericite-hematite-carbonate (+/- quartz-ankerite veining and pyrite), chlorite-pyrite veins and stringers,epidote-pyrite-(chalcopyrite) veins, stringers and patches, sections of magnetite-chalcopyrite, massive-brecciated-ribboned quartz-ankerite-tourmaline (+/- pyrite) veins, quartz-chlorite veins, and rare intervals of quartz-ankerite-fuchsite alteration. All of these zones were hosted in a peculiar assemblage of rock types that includes a mafic, heterolithic, fragmental-textured material, mafic-porphyritic syenite dykes, massive to plagioclase-porphyritic mafic flows, minor ultramafic flows, and minor amounts of felsic ash and lapilli tuffs. This particular assemblage of units has not been adequately described or classified by previous workers, however was felt to belong to the Kinojevis Group [sic Lower Blake River assemblage] based on visual observations at the time of logging."

"The strongest occurrences of alteration/mineralization were intersected in holes LM94-6 and LM94-7. Textural relationships of these different alteration zones suggested a complex paragenetic sequence with the pervasive sericite-hematite being the earliest and the epidote-pyrite veins and patches being relatively late in the sequence. Gold values were generally low in all three of these holes, usually being only in the 100's of ppb Au [gold] range, with the best values of 0.098 opt [oz/ton] Au (3,360 ppb)/2.0 feet (1252.8-1254.8 ft) being returned from a zone of semi-massive epidote-pyrite in hole LM94-6. However, a great number of geochemically anomalous gold values, at times across large widths (e.g. 178 ppb Au/280.0 feet and 126 ppb Au/179.1 feet in hole LM94-7), were intersected by holes LM94-6 and LM94-7. These values do not seem to follow any particular type of alteration, but are hosted by all rock types and all styles of alteration. This is considered to be encouraging, as it suggests the presence of a gold-bearing hydrothermal system of sufficient strength and size to form such a diverse and pervasive geochemical halo."

The broad zones of geochemically anomalous gold described above by Pressacco, include aggregates of both cut core and composite samples. The interval in drillhole 94-7 (178 ppb over 280 ft, or, 0.18 g/t over 85.4 m) includes both cut core and composite samples although the highest grade corridor with 0.58 g/t over 6.1 m (20 ft) is cut core at the very top of the system. Composite samples yielded assays up to 0.45 g/t gold over 8.0 m in drillhole 94-6, but no specific mineralized corridors were defined, and, no further drilling has been undertaken on the property.

The three drillholes in the northwest part of the property also tested several magnetic anomalies. Pressacco (1994) noted the sources of the mag anomalies were found to be discrete beds of magnetite, or, sections of magnetic, mafic fragmental units. Where discrete "beds" of magnetite were encountered, they contained significant quantities of chalcopyrite, and, are similar to mineralization at the Upper Beaver mine (Pressacco, 1994). A best value of 0.45 g/t gold over 0.7 m, from 268.4-269.1 m, was intersected in drillhole 94-5 in this environment.

## 24.3 Exploration, Drilling and Recommendations:

No new diamond drilling has been undertaken on the Lac McVittie property since 1994. Only a limited amount of linecutting and geophysics was completed by Royal Oak Mines in 1996.

Elements of Upper Beaver style mineralization occur in the northwest corner of the property, and, the mineralization has an uncertain relationship to the interpreted trace of the South Branch Upper Canada Break. Combined with the presence of the Victoria Creek deformation zone, the Spectacle Lake anticline, isolated syenite plugs, and, variable strong alteration and mineralization, this area is an attractive target. The target also has implications for the larger syenite plug cut by the South Branch Upper Canada Break in the eastern part of the Upper Beaver property. A first-pass review of the data vintage and density in the northwest corner of the property should be undertaken, with survey data amended to today's standards, and, a subtle shift in focus away from electromagnetic anomalies to an Upper Beaver style environment. Short of targets generated from the review, a fence of drillholes may be warranted to establish the stratigraphic framework and more tightly define the structural elements of the area.

#### 25.0 SAMPLING AND DATA VERIFICATION:

#### 25.1 Sampling Method and Approach:

All of the 191 drillholes in the 2002-06 exploration program were sampled for gold content, plus a large proportion of the Upper Beaver samples were also assayed for copper. Samples of core were cut in half using a Vancon Core Saw with a diamond blade. As a point of reference, some 12,400 samples were taken from the 64 drillholes in the 2002-03 period of the program, and, 18,329 samples were assayed during the Upper Beaver drilling campaigns in 2005-06 (74 drillholes). Samples were cut and submitted for analysis to Swastika Laboratories in Swastika, Ontario.

Swastika Laboratories was the primary assay facility for the 2002-06 program. They have received the "Certificate of Laboratory Proficiency" accredited by the Standards Council of Canada.

The rule of thumb for designating samples is that the normal sample size is one meter (or three feet when units are imperial). The geologist outlines the sample directly on the core and inserts a sample ticket at the end of the sample during the logging process. The target area in the drillhole is thoroughly sampled based on lithology combined with the sphere of influence of alteration and mineralization. In unmineralized areas, or sections without any expectation of gold content, check samples are routinely taken every 30 to 60 m depending on the amount of prior data available on a particular rock unit. Rock units less than a meter in size are sampled in their entirety or may be split into more than one sample at the discretion of the geologist – for example, two smaller samples of a unique mineralized zone in the order of a meter in size are preferable to one sample of the entire unit. Sampling of expected high-grade intervals is restricted as close as possible to the sphere of the mineralization (often less than 30 cm) to alleviate overstating the final composite, particularly if the mineralization is not representative of the overall zone.

There are no core recovery factors that materially affect the results reported. Further, any sections of lost core due to either rock quality or mechanical problems are rated at nil gold content.

The sample quality obtained through the cut core is excellent and tends to be more representative of the interval than hand splitting methods. The core is cut along the core axis to preserve the features noted in the log such that a nondistorted / representative sample is returned to the core box for storage. If there is a preferred orientation for cutting the core to accommodate cross structures etc, a line is drawn on the core by the geologist and the core cutter is advised of the variation in the routine. The core cutter is similarly advised of potential high-grade sections where special care is warranted both in creating a representative sample and cleaning of the equipment between samples to avoid contamination.

Sections of core with visible gold are normally cut and both halves of the core returned to the core box – the geologist subsequently choosing the best representation of the sample. The assay lab is also advised of potential high-grade samples thereby avoiding possible contamination of other samples in the batch. Communication amongst employees and with the assay facility is excellent.

Significant high-grade sections are identified within the intervals reported for drill results: an example is the discovery drillhole on the Anoki South Zone, AN-02-20 reported an overall interval

of 4.5 m core length grading 6.4 g/t from 353.2 to 357.7 m, including 23.6 g/t over 1.0 m from 353.2 to 354.2 m. Drill results, sample composites and descriptions of the geology and mineralization are reported under the individual property descriptions in the text. True widths of the mineralized samples are included except where there is insufficient data to establish the second dimension.

#### 25.2 Sample Preparation, Analyses and Security:

The only aspect of sample preparation done in-house is the physical task of cutting the drill core. Half-core samples are placed in plastic bags with one half of the assay ticket and stored in pails for pickup by the assay lab. Samples are entered on the drill logs by the geologist at the time of logging, and, batch lists are prepared by the core cutter. The half-core not submitted for assay is returned to the core box with the other half of the assay ticket and stored / racked on site for easy reference.

At the assay facility, core samples are dried, crushed and further reduced to approximately 6 mesh. A Jones riffle is used to take a 400-g subsample for pulverizing with the balance of the sample bagged and stored as a reject. The 400-g sample is pulverized to – 100 mesh (the pulp), blended, and, a 29.17 gram (one assay ton) portion taken for assay. Samples assaying less than 1 g/t are finished by Atomic Absorption, greater than 1 g/t gravimetrically. Copper assays greater than 10,000 ppm are re-assayed in percent. Repeat or check assays on the original pulp are randomly run on approximately 10% of the samples by the lab. A standard and a blank are routinely assayed every twentieth sample at positions 10, 30, 50 etc in a batch.

In addition to the above, samples assaying greater than 1 g/t are reassayed by creating a second pulp from the reject. Samples containing visible gold are normally detected at the logging process and are submitted to the lab for metallic sieve analysis. In a metallic sieve analysis, the total sample is pulverized with both the fine and coarse factions analyzed for gold content and mass balance calculations subsequently made to determine the final assay. The process is designed to amend the problem of gold's malleability during the crushing/ pulverizing process. Any surprises in the assay results are easily reviewed via the stored drill core on site, and, the stored core can be further guartered if a new sample is required.

Swastika Laboratories was the primary assay facility for the 2002-06 program. They have received the "Certificate of Laboratory Proficiency" accredited by the Standards Council of Canada.

During the 2002-03 program, standards and blanks were prepared by Swastika Labs, a practise since abandoned due to an inability to certify local standards. Those standards were derived from the Toburn tailings which were both uniform in character and locally relevant. Subsequently, Swastika Labs purchased commercially available standards from Mines Assay Supplies / Anachemia Canada Inc. The statistics on the standards were obtained from the lab and results monitored over the course of the program for 'drift'. No perceptible drift was noted.

In addition to quality control measures at Swastika Labs via monitoring standards, blanks, check assays and rechecks on assays greater than 1 g/t, all of the samples used in the resource calculation for the Anoki South deposit were rechecked at SGS Labs in Rouyn, Quebec. Rejects were the preferred medium for check analysis. All of the composites were less than 20% from the mean established between the two facilities. The strongest variance (19.75% from the mean) occurred in the presence of coarse visible gold. In composites where high-grade samples were cut to 1 ounce (34.3 gms), the variance from the mean was less than 1.8%, and, in composites where no cutting was required, the variance from the mean was less than 3.9%. The correlation is acceptable.

During the McBean drilling program in 2006, 11.9% (226/1900) of the samples were submitted to Expert Labs in Rouyn-Noranda, Quebec for recheck analysis. Both pulps (106) and rejects (120) were assayed. Overall, Expert Labs overstated the Swastika results on pulps by an average of 1.77%, and, understated rejects by 10.5%. The average for both types of samples was a 4.77% understatement of the Swastika results. Again, results are comparable.

The Upper Beaver samples from Swastika Labs are rechecked at Polymet Resources in Cobalt, Ontario. Some 10% of samples are reassayed, comprised of an equal mix of pulps and rejects.

#### 25.3 Data Verification:

Quality assurance and quality control measures have been evolving over the last number of years. Prior work by Queenston on the Kirkland Lake Gold Project between 1996 and 1998 involved plotting and graphing of standards, blanks and all check assays for both the original lab and the recheck assay facility. The objective of the exercise was to replicate assays in the order of +/- 10% on pulp versus pulp checks, +/- 20% on reject versus reject analyses, and, +/- 2 standard deviations on the standards used. The percentages were chosen from surveys of the literature and much in-house discussion. In general, the objective was met in both the 1996-98 data and in the 2002-06 results. Variations from the norm required an explanation – the most

common departures were in the presence of visible gold where a pronounced 'nugget effect' was noted in some samples assaying greater than 10 g/t.

Currently, standards and blanks are monitored, any assays greater than 1 g/t are reassayed from the reject portion of the sample, copper assays greater than 10,000 ppm are reassayed in percent, samples containing visible gold are subject to a metallic sieve analysis, and, roughly 10% of the samples are reassayed at a second facility. In 2007, Queenston began purchasing commercially available standards and implemented a system of inserting blind standards inhouse to further upgrade QA/QC procedures.

Data acquisition for the 2002-06 program, from choosing the target to generating plans and sections was, for the most part, done in-house using best practice guidelines for the mining industry. Historic data have been reviewed by Roscoe Postle Associates Inc, from Toronto, via their 1996 "Report on the Kirkland Lake Gold Project for Queenston Mining". Data not verified by the author are either quoted and italicized, or, directly attributed in the body of the text.

#### 26.0 CONCLUSIONS AND RECOMMENDATIONS:

The 2002-06 exploration program tested a number of geological environments on Queenston's large land package, discovered a new resource (the Anoki South Zone) and laid the groundwork for a substantial drill program on the Upper Beaver property to further delineate the gold and copper zones intersected in the 2005-06 drill campaigns. As part of the 2002-06 program, Roscoe- Postle Associates Inc. completed an independent assessment of the mineral resources on the Anoki deposit (dated March 31, 2004). They calculated an inferred mineral resource of 106,000 tonnes grading 6.48 g/t gold on the newly discovered Anoki South Zone, and, upgraded the historic resource on the Anoki deposit to NI 43-101 standards. At a recommended 3.5 g/t gold cutoff grade, RPA estimated the Anoki deposit to contain 522,300 t of measured and indicated resources grading 5.7 g/t gold, and, 35,800 t of inferred resources grading 5.69 g/t gold.

Recommendations for individual properties are found in the text of the report. In general, a mix of grassroots exploration, 3D computer modelling and diamond drilling on more mature targets is envisaged. Continued testing of the regional structures on the Vigrass-Golden Gate, Rand-Ross and Cunningham properties would advance the knowledge on these features, and, follow-up drilling from IP and geochem surveys on the Pawnee and Lebel Stock properties could lead to a more effective way to discriminate the large number of targets within the sizeable land package.

In addition to the regional structures, cross structures have become a new and important target in the Kirkland Lake gold camp. Recent discoveries via Kirkland Lake Gold (2007), indicate the presence of mineralized cross structures near perpendicular to the historically mined regional features. A 3D computer modelling program initiated by Queenston in 2005, is planned to assist in the definition of these structures and help generate future exploration targets. Cross structures are most relevant to properties near the new discoveries by Kirkland Lake Gold as the Amalgamated Kirkland, Kirkland Lake West and Gracie West properties. The modelling, however, is also useful on a number of other deposits where subtle relationships between alteration, mineralization, stratigraphy and structure can be more fully examined in three dimensions. Modelling is underway on the Anoki, McBean, Upper Canada, Amalgamated Kirkland and Upper Beaver deposits, and, is recommended on the Golden Gate, Pawnee and 180 East mineralization.

Diamond drilling on more mature targets is recommended for the Anoki, McBean and Upper Beaver mineralization. Drilling of the Anoki South target, the 40 East targets and discovery of the 48 East Zone mineralization indicate that there are a number of nearby targets that could enhance the economics of the Anoki deposit. Opportunities exist for expanding segments of the Anoki deposit through additional drilling, and, finding other Anoki South style mineralized zones. Diamond drilling of a number of these targets, however, is best accomplished from underground and must await developments on the adjacent McBean lands.

Both the Kirkland Lake West and the Upper Beaver properties have sufficient encouragement to warrant continued exploration. Both of these properties have substantial program commitments from in-house recommendations that have commenced in 2007.

Updating of historic resouces to NI 43-101 standards is also a priority. The updating effort is recommended to continue either supplemented by additional diamond drilling as on the McBean deposit, or, by a thorough review of the parameters used on the other historic calculations as the Amalgamated Kirkland, 180 East, McBean and Upper Canada deposits. The NI 43-101 compliant resource calculations (Anoki Main and Anoki South) also require revisiting given the time dependent costs of production and price of gold used.

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## 28.0 CERTIFICATE AND CONSENT OF QUALIFIED PERSON:

As author of the report entitled "Technical Report on Mineral Properties of Queenston Mining Inc. in the Kirkland Lake Gold Camp", dated November 15, 2007, I, Dale R. Alexander make the following statements:

1. My residential address is:

#1 Wright Hargreaves Avenue Kirkland Lake, Ontario P2N 1B1

2. I am currently retired but was employed during the period of April 1996 to May 2006 as:

Exploration Manager Queenston Mining Inc. Box 996 Kirkland Lake, Ontario P2N 3L1

- 3. I graduated with a Bachelor of Science degree in Geology from the University of New Brunswick in 1970.
- 4. I am registered as a Professional Geoscientist in the Province of Ontario (# 0524), and, as a member with retired / nonpracticing status in the Province of Saskatchewan (# M10850).
- I am a member of the Northern Prospectors Association, the Ontario Prospectors Association, the Prospectors and Developers Association of Canada, the Canadian Institute of Mining Metallurgy and Petroleum, and, a Fellow of the Geological Association of Canada.
- 6. I am a Qualified Person for the purposes of National Instrument 43-101.
- I am responsible for writing the Technical Report. Data not verified are either quoted and italicized, and/or, directly attributed in the body of the text, with references cited at the end of the report.
- I am not aware of any material fact or material change with respect to the subject matter of the Technical Report which is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- 9. I am not independent of the issuer, having been employed as Exploration Manager for Queenston Mining in Kirkland Lake, and, a current shareholder.
- I have read National Instrument 43-101, Standards of Disclosure for Mineral Projects, Companion Policy 43-101CP and Form 43-101F, and, the Technical Report has been prepared to comply with the legislation.

DALER

MEMBE R

Dated at: Kirkland Lake, Ontario, November 15, 2007

Appendix A Property and Claim List

# **Queenston Mining Inc. - Kirkland Lake Project** Property and Claim List Summary

Property	<u>Leases</u>	Patented	<u>Unpatented</u>	Total Units	Interest
	_	<b>.</b>	4.5	50	1000/
Vigrass - Golden Gate	7	21	15	52	100%
Gracie West	2	13	5	21	50%
Kirkland Lake West	1	15	0	18	25%
Sylvanite	0	5	0	5	100%
Teck A & B	4	2	38	59	100%
Amalgamated	1	0	0	27	100%
Gull Lake	1	0	21	22	100%
Rand-Ross	0	28	14	42	100%
Pawnee	3	4	0	42	100%
Cunningham	0	5	22	27	100%
Lebel Stock	0	0	216	216	100%
Munro	5	36	6	103	100%
Anoki-McBean	0	29	2	31	100%
Princeton-Mayfair	0	17	6	23	100%
Upper Canada	0	46	10	57	100%
Upper Beaver	3	32	4	72	100%
Lac-McVittie	0	0	61	61	41%
-	27	253	420	878	

# **Queenston Mining Inc. - Property and Claim List** (a definiiton of terms is located a the end of the list)

## Vigrass - Golden Gate

0							
<u>Claim Number</u>	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
1199	1	Teck	Patented	M+SR	100%	NA	2% NSR + NM NSR
892089	1	Teck	Unpatented	MRO	100%	2010-Jun-19	10% NPI + NM NSR
8664	1	Teck	Patented	M+SR	100%	NA	2% NSR + NM NSR
9880	1	Teck	Patented	M+SR	100%	NA	2% NSR + NM NSR
HR544	1	Teck	Patented	M+SR	100%	NA	2% NSR + NM NSR
891856	1	Teck	Unpatented	MRO	100%	2010-Apr-10	10% NPI + NM NSR
891860	1	Teck	Unpatented	MRO	100%	2010-Jul-17	10% NPI + NM NSR
894181	1	Teck	Unpatented	MRO	100%	2010-Jul-24	10% NPI + NM NSR
16523	1	Teck	Patented	MRO	100%	NA	2% NSR + NM NSR
16252	1	Teck	Patented	MRO	100%	NA	2% NSR + NM NSR
12619	1	Teck	Patented	MRO	100%	NA	2% NSR + NM NSR
1214034	2	Otto	Unpatented	MRO	100%	2010-Nov-01	2% NSR + NM NSR
2697	1	Teck	Patented	MRO	100%	NA	2% NSR + NM NSR
107020	1	Teck	Lease	MRO	100%	2012-Jun-01	NM NSR
983348	1	Teck	Unpatented	MRO	100%	2010-Sep-21	2% NSR + NM NSR
983349	1	Teck	Unpatented	MRO	100%	2010-Sep-21	2% NSR + NM NSR
2696	1	Teck	Patented	MRO	100%	NA	2% NSR + NM NSR
2692	1	Teck	Patented	M+SR	100%	NA	2% NSR + NM NSR
12088	1	Teck	Patented	MRO	100%	NA	2% NSR + NM NSR
105980	1	Teck	Lease	MRO	100%	2011-Nov-01	2% NSR + NM NSR
105979	5	Teck	Lease	MRO	100%	2011-Nov-01	2% NSR + NM NSR
16425	1	Otto	Patented	M+SR	100%	2019-Jun-01	2% NSR + NM NSR
16424	1	Otto	Patented	M+SR	100%	2012-Jun-01	2% NSR + NM NSR
842767	1	Otto	Unpatented	MRO	100%	2010-Jun-03	10% NPI + NM NSR
843837	1	Otto	Unpatented	MRO	100%	2010-Jun-03	10% NPI + NM NSR
842782	1	Otto	Unpatented	MRO	100%	2010-Jun-03	10% NPI + NM NSR
843171	1	Otto	Unpatented	MRO	100%	2010-Jun-03	10% NPI + NM NSR
107123*	1	Otto	Lease	MRO	100%	2019-Jun-01	2% NSR + NM NSR
544549	1	Otto	Lease	MRO	100%	2012-Jun-01	2% NSR + NM NSR
842660	1	Otto	Unpatented	MRO	100%	2010-Jun-03	2% NSR + NM NSR
1219966	1	Otto	Unpatented	MRO	100%	2010-Nov-01	2% NSR + NM NSR
843400	1	Otto	Unpatented	MRO	100%	2010-Jun-03	10% NPI + NM NSR
106584	3	Otto	Lease	MRO	100%	2012-Jun-01	2% NSR + NM NSR
107124*	4	Otto	Lease	MRO	100%	2019-Jun-01	2% NSR + NM NSR
9759	1	Otto	Patented	MRO	100%	NA	2% NSR + NM NSR
9760	1	Otto	Patented	MRO	100%	NA	2% NSR + NM NSR
9592	1	Otto	Patented	MRO	100%	NA	2% NSR + NM NSR
9591	1	Otto	Patented	MRO	100%	NA	2% NSR + NM NSR
32236	1	Otto	Patented	MRO	100%	NA	2% NSR + NM NSR
32237	1	Otto	Patented	MRO	100%	NA	2% NSR + NM NSR
32238	1	Otto	Patented	MRO	100%	NA	2% NSR + NM NSR
16423	1	Eby	Patented	MRO	100%	NA	2% NSR + NM NSR
	52						* 1

* = advance royalty

## **Gracie West**

Claim Number	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
4230	1	Teck	Patented	M+SR	50%	NA	NONE
9809-14	6	Teck	Patented	M+SR	50%	NA	NONE
6842-6843	2	Teck	Patented	M+SR	50%	NA	NONE
6863	1	Teck	Patented	M+SR	50%	NA	NONE
4869	1	Teck	Patented	M+SR	50%	NA	NONE
16680	1	Teck	Patented	M+SR	50%	NA	NONE
16614	1	Teck	Patented	M+SR	50%	NA	NONE
892085	1	Teck	Unpatented	MRO	50%	2010-Jun-19	10% NPI + NM NSR
892088	1	Teck	Unpatented	MRO	50%	2010-Jun-19	10% NPI + NM NSR
927914	1	Teck	Unpatented	MRO	50%	2010-Jun-23	10% NPI + NM NSR
927921	1	Teck	Unpatented	MRO	50%	2010-Jun-23	10% NPI + NM NSR
927927	1	Teck	Unpatented	MRO	50%	2010-Jun-23	10% NPI + NM NSR
105470	2	Teck	Lease	MRO	50%	2010-Jun-23	10% NPI + NM NSR
105469	1	Teck	Lease	MRO	50%	2011-Jun-01	10% NPI + NM NSR
	21						

<u>Note</u>: The property is owned 50% by Queenston Mining and 50% by Kirkland Lake Gold.

<u>Claim Number</u>	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
HR1421-25	5	Teck	Patented	M+SR	25%	NA	NONE
HR1427-28	2	Teck	Patented	M+SR	25%	NA	NONE
HS1154	1	Teck	Patented	M+SR	25%	NA	NONE
7711	1	Teck	Patented	M+SR	25%	NA	NONE
HR1156	1	Teck	Patented	M+SR	25%	NA	NONE
HS1164-65	2	Teck	Patented	M+SR	25%	NA	NONE
16477	1	Teck	Patented	M+SR	25%	NA	1% NSR
1385	1	Teck	Patented	M+SR	25%	NA	1% NSR
16480	1	Teck	Patented	M+SR	25%	NA	1% NSR
105248	3	Teck	Lease	MRO	25%	2011-Feb-28	NONE
	18						

## **Kirkland Lake West**

<u>Note:</u> Queenston Mining Inc. and Kirkland Lake Gold Inc. are jointly earning a 50% interest in the Kirkland Lake West property by expending exploration expenditures amounting to CDN \$2.5 million by June 30, 2008. On completion of the earn-in ownership in the property will be Queenston 25%, Kirkland Lake Gold 25% and newmont 50%.

### Sylvanite

Claim Number	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	Royalty
2101 (11398)	1	Teck	Patented	MRO	100%	NA	NM NSR
2100, 2102	2	Teck	Patented	MRO	100%	NA	NM NSR
2226-27	2	Teck	Patented	MRO	100%	NA	NM NSR
	5						

# Teck A&B

<u>Claim Number</u>	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
16457-59	3	Otto	Patented	MRO	100%	NA	NM NSR
1203540	2	Teck	Unpatented	MRO	100%	2010-Sep-26	NM NSR
981876	1	Teck	Unpatented	MRO	100%	2010-Aug-11	2% NSR + NM NSR
981871	1	Teck	Unpatented	MRO	100%	2010-Sep-01	2% NSR + NM NSR
3006754	1	Teck	Unpatented	MRO	100%	2012-Jun-02	NM NSR
106571	2	Teck	Lease	MRO	100%	2012-Jun-01	2% NSR + NM NSR
106131	2	Teck	Lease	MRO	100%	2012-Mar-01	2% NSR + NM NSR
1111433	1	Teck	Unpatented	MRO	100%	2010-Jun-01	2% NSR + NM NSR
6817*	1	Teck	Patented	M+SR	100%	NA	2% NSR + NM NSR
626766-67	2	Teck	Unpatented	MRO	100%	2010-Oct-06	2% NSR + NM NSR
620929-32	4	Teck	Unpatented	MRO	100%	2010-Oct-13	2% NSR + NM NSR
636796-00	5	Teck	Unpatented	MRO	100%	2010-Nov-26	2% NSR + NM NSR
CLM400-106583	10	Teck	Lease	MRO	100%	2012-Jun-01	2% NSR + NM NSR
106130	3	Teck	Lease	MRO	100%	2012-Mar-01	2% NSR + NM NSR
891865	1	Teck	Unpatented	MRO	100%	2010-Feb-16	2% NSR + NM NSR
626769	1	Teck	Unpatented	MRO	100%	2010-Aug-14	2% NSR + NM NSR
822938-40	3	Teck	Unpatented	MRO	100%	2010-Jan-24	2% NSR + NM NSR
1046466-73	8	Teck	Unpatented	MRO	100%	2010-Jun-08	NM NSR
1046474-77 1225550-52	4 3	Lebel Lebel	Unpatented	MRO MRO	100% 100%	2010-Jun-08 2010-Apr-09	NM NSR NM NSR
1226873	3 1	Lebel	Unpatented Unpatented	MRO	100%	2010-Apr-09 2010-May-13	NM NSR
1220073	59	Lebel	Unpatenteu	WIKO	100%	2010-May-13	
	55						
							* = advance rovaltv
Amalgamated K	irklan	d (AK)					* = advance royalty
Amalgamated K	<b>irklan</b> <u>Units</u>	<b>d (AK)</b> <u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	* = advance royalty <u>Royalty</u>
-	<u>Units</u>		<u>Claim Type</u> Lease	<u>Rights</u> MRO	Interest 100%	Due Date 2012-Jun-01	
Claim Number	<u>Units</u>	<u>Township</u>					<u>Royalty</u>
<u>Claim Number</u> CLM 328 (106667)	<u>Units</u>	<u>Township</u>					<u>Royalty</u>
<u>Claim Number</u> CLM 328 (106667)	<u>Units</u>	<u>Township</u>					<u>Royalty</u>
<u>Claim Number</u> CLM 328 (106667) <b>Gull Lake</b> <u>Claim Number</u>	<u>Units</u> 27	<u>Township</u> Teck	Lease	MRO	100%	2012-Jun-01	<u>Royalty</u> 0.61% NSR + NM NSR
Claim Number CLM 328 (106667) Gull Lake	<u>Units</u> 27 <u>Units</u>	<u>Township</u> Teck <u>Township</u>	Lease <u>Claim Type</u>	MRO <u>Rights</u>	100%	2012-Jun-01 Due Date	<u>Royalty</u> 0.61% NSR + NM NSR <u>Royalty</u>
<u>Claim Number</u> CLM 328 (106667) <b>Gull Lake</b> <u>Claim Number</u> 106966	Units 27 Units 1	<u>Township</u> Teck <u>Township</u> Lebel	Lease <u>Claim Type</u> Lease	MRO <u>Rights</u> MRO	100% Interest 100%	2012-Jun-01 Due Date 2012-Jun-01	<u>Royalty</u> 0.61% NSR + NM NSR <u>Royalty</u> 10% NPI + NM NSR
<u>Claim Number</u> CLM 328 (106667) <b>Gull Lake</b> <u>Claim Number</u> 106966 643183	Units 27 Units 1 1	Township Teck Township Lebel Lebel	Lease <u>Claim Type</u> Lease Unpatented	MRO <u>Rights</u> MRO MRO	100% Interest 100% 100%	2012-Jun-01 <u>Due Date</u> 2012-Jun-01 2010-Sep-20	<u>Royalty</u> 0.61% NSR + NM NSR <u>Royalty</u> 10% NPI + NM NSR 10% NPI + NM NSR
<u>Claim Number</u> CLM 328 (106667) <b>Gull Lake</b> <u>Claim Number</u> 106966 643183 643187	<u>Units</u> 27 <u>Units</u> 1 1 2 2	Township Teck Township Lebel Lebel Lebel	Lease <u>Claim Type</u> Lease Unpatented Unpatented	MRO <u>Rights</u> MRO MRO MRO	100% Interest 100% 100% 100%	2012-Jun-01 <u>Due Date</u> 2012-Jun-01 2010-Sep-20 2010-Sep-20	<u>Royalty</u> 0.61% NSR + NM NSR 0.61% NSR + NM NSR <u>Royalty</u> 10% NPI + NM NSR 10% NPI + NM NSR 10% NPI + NM NSR 10% NPI + NM NSR 10% NPI + NM NSR
<u>Claim Number</u> CLM 328 (106667) <b>Gull Lake</b> <u>Claim Number</u> 106966 643183 643187 643213-14	Units 27 Units 1 1 2 2 4	Township Teck Township Lebel Lebel Lebel Lebel Lebel Lebel Lebel	Lease <u>Claim Type</u> Lease Unpatented Unpatented Unpatented Unpatented Unpatented	MRO <u>Rights</u> MRO MRO MRO MRO MRO	100% Interest 100% 100% 100% 100% 100%	2012-Jun-01 <u>Due Date</u> 2012-Jun-01 2010-Sep-20 2010-Sep-20 2010-Sep-10 2010-Sep-20 2010-Sep-20 2010-Sep-20 2010-Sep-20	<u>Royalty</u> 0.61% NSR + NM NSR 0.61% NSR + NM NSR <u>Royalty</u> 10% NPI + NM NSR 10% NPI + NM NSR
<u>Claim Number</u> CLM 328 (106667) <b>Gull Lake</b> <u>Claim Number</u> 106966 643183 643187 643213-14 644007-08 644478-81 644488-89	Units 27 Units 1 1 2 2 4 2	Township Teck Township Lebel Lebel Lebel Lebel Lebel Lebel Lebel	Lease Claim Type Lease Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented	MRO <u>Rights</u> MRO MRO MRO MRO MRO MRO MRO MRO	100% Interest 100% 100% 100% 100% 100% 100%	2012-Jun-01 <u>Due Date</u> 2012-Jun-01 2010-Sep-20 2010-Sep-20 2010-Sep-10 2010-Sep-20 2010-Sep-20 2010-Sep-20 2010-Sep-20	<u>Royalty</u> 0.61% NSR + NM NSR 0.61% NSR + NM NSR <u>Royalty</u> 10% NPI + NM NSR 10% NPI + NM NSR
<u>Claim Number</u> CLM 328 (106667) <b>Gull Lake</b> <u>Claim Number</u> 106966 643183 643187 643213-14 644007-08 644478-81 644488-89 800153-56	Units 27 Units 1 1 2 2 4 2 4 2 4	Township Teck Township Lebel Lebel Lebel Lebel Lebel Lebel Lebel Lebel	Lease Claim Type Lease Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented	MRO <u>Rights</u> MRO MRO MRO MRO MRO MRO MRO MRO	100% Interest 100% 100% 100% 100% 100% 100% 100%	2012-Jun-01 <u>Due Date</u> 2012-Jun-01 2010-Sep-20 2010-Sep-20 2010-Sep-10 2010-Sep-20 2010-Sep-20 2010-Sep-20 2010-Sep-20 2010-Sep-20 2010-Sep-20 2010-Sep-20 2010-Sep-20	<u>Royalty</u> 0.61% NSR + NM NSR 0.61% NSR + NM NSR <u>Royalty</u> 10% NPI + NM NSR 10% NPI + NM NSR
Claim Number CLM 328 (106667) Gull Lake Claim Number 106966 643183 643187 643213-14 644007-08 644478-81 644478-81 644488-89 800153-56 802410-12	Units 27 Units 1 1 2 2 4 2 4 2 4 3	Township Teck Township Lebel Lebel Lebel Lebel Lebel Lebel Lebel Lebel Lebel	Lease Claim Type Lease Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented	MRO <u>Rights</u> MRO MRO MRO MRO MRO MRO MRO MRO	100% Interest 100% 100% 100% 100% 100% 100% 100% 100	2012-Jun-01 <u>Due Date</u> 2012-Jun-01 2010-Sep-20 2010-Sep-20 2010-Sep-10 2010-Sep-16 2010-Sep-20 2010-Sep-20 2010-Sep-20 2010-Jun-26 2010-Jun-06	<u>Royalty</u> 0.61% NSR + NM NSR 0.61% NSR + NM NSR <u>Royalty</u> 10% NPI + NM NSR 10% NPI + NM NSR
Claim Number CLM 328 (106667) Gull Lake Claim Number 106966 643183 643187 643213-14 644007-08 644478-81 644488-89 800153-56 802410-12 1242095	Units 27 Units 1 1 2 2 4 2 4 2 4 3 1	Township Teck Township Lebel Lebel Lebel Lebel Lebel Lebel Lebel Lebel Lebel Lebel	Lease Claim Type Lease Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented	MRO <u>Rights</u> MRO MRO MRO MRO MRO MRO MRO MRO	100% Interest 100% 100% 100% 100% 100% 100% 100% 100	2012-Jun-01 <u>Due Date</u> 2012-Jun-01 2010-Sep-20 2010-Sep-20 2010-Sep-10 2010-Sep-16 2010-Sep-20 2010-Sep-20 2010-Jun-26 2010-Jun-06 2010-Aug-01	Royalty 0.61% NSR + NM NSR 0.61% NSR + NM NSR <u>Royalty</u> 10% NPI + NM NSR 10% NPI + NM NSR
Claim Number CLM 328 (106667) Gull Lake Claim Number 106966 643183 643187 643213-14 644007-08 644478-81 644478-81 644488-89 800153-56 802410-12	Units 27 Units 1 1 2 2 4 2 4 2 4 3	Township Teck Township Lebel Lebel Lebel Lebel Lebel Lebel Lebel Lebel Lebel	Lease Claim Type Lease Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented Unpatented	MRO <u>Rights</u> MRO MRO MRO MRO MRO MRO MRO MRO	100% Interest 100% 100% 100% 100% 100% 100% 100% 100	2012-Jun-01 <u>Due Date</u> 2012-Jun-01 2010-Sep-20 2010-Sep-20 2010-Sep-10 2010-Sep-16 2010-Sep-20 2010-Sep-20 2010-Sep-20 2010-Jun-26 2010-Jun-06	<u>Royalty</u> 0.61% NSR + NM NSR 0.61% NSR + NM NSR <u>Royalty</u> 10% NPI + NM NSR 10% NPI + NM NSR

# Rand-Ross

Claim Number	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	<u>Interest</u>	Due Date	Royalty
1132251	1	Teck	Unpatented	MRO	100%	2010-May-18	NM NSR
1111439-42	4	Teck	Unpatented	MRO	100%	2010-Jun-01	NM NSR
1111453	1	Teck	Unpatented	MRO	100%	2010-Jun-01	NM NSR
1146063	1	Teck	Unpatented	MRO	100%	2010-May-18	NM NSR
1132280	1	Teck	Unpatented	MRO	100%	2010-May-18	NM NSR
1049642	1	Teck	Unpatented	MRO	100%	2010-Dec-05	NM NSR
2880	1	Teck	Patented	M+SR	100%	NA	NM NSR
7778	1	Teck	Patented	M+SR	100%	NA	NM NSR
2249-50	2	Teck	Patented	M+SR	100%	NA	NM NSR
9852	1	Teck	Patented	M+SR	100%	NA	NM NSR
1222172	1	Teck	Unpatented	MRO	100%	2010-Jul-21	NM NSR
1449	1	Lebel	Patented	M+SR	100%	NA	NM NSR
1479-80	2	Lebel	Patented	M+SR	100%	NA	NM NSR
7859	1	Lebel	Patented	M+SR	100%	NA	NM NSR
8080	1	Lebel	Patented	M+SR	100%	NA	NM NSR
8861-62	2	Lebel	Patented	M+SR	100%	NA	NM NSR
1225888	1	Lebel	Unpatented	MRO	100%	2010-Jun-03	NM NSR
3019098	1	Lebel	Unpatented	MRO	100%	2010-Jun-26	NONE
2029-30	2	Lebel	Patented	M+SR	100%	NA	NM NSR
2034	1	Lebel	Patented	M+SR	100%	NA	NM NSR
1872	1	Lebel	Patented	M+SR	100%	NA	NM NSR
1873	1	Lebel	Patented	M+SR	100%	NA	NM NSR
2345	1	Lebel	Patented	M+SR	100%	NA	NM NSR
2769-70	2	Lebel	Patented	M+SR	100%	NA	NM NSR
3006753	1	Lebel	Unpatented	MRO	100%	2012-Jun-02	NONE
7875	1	Lebel	Patented	M+SR	100%	NA	NM NSR
3070099	1	Lebel	Unpatented	MRO	100%	2010-Jun-26	NONE
7418-20	3	Lebel	Patented	M+SR	100%	NA	2.5% NSR + NM NSR
2396	1	Lebel	Patented	M+SR	100%	NA	2.5% NSR + NM NSR
2400-01	2	Lebel	Patented	M+SR	100%	NA	2.5% NSR + NM NSR
6483	1	Lebel	Patented	M+SR	100%	NA	2.5% NSR + NM NSR
	42						

## Pawnee

<u>Claim Number</u>	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
CLM131-106722	27	Lebel	Lease	M+SR	100%	2014-Aug-01	NM NSR
CLM131-106721	1	Lebel	Lease	M+SR	100%	2014-Aug-01	NM NSR
464-67	4	Lebel	Patented	M+SR	100%	NA	NM NSR
CLM132-107145	10	Lebel	Lease	MRO	100%	2019-Mar-01	NM NSR
	42						

# Cunningham

<u>Claim Number</u>	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
27140-42	3	Lebel	Patented	M+SR	100%	NA	2% NSR + NM NSR
27510-11	2	Lebel	Patented	M+SR	100%	NA	2% NSR + NM NSR
859580-82	3	Lebel	Unpatented	MRO	100%	2010-Feb-24	2% NSR + NM NSR
882658-60	3	Lebel	Unpatented	MRO	100%	2010-Feb-24	2% NSR + NM NSR
892274-79	6	Lebel	Unpatented	MRO	100%	2010-May-09	2% NSR + NM NSR
980442	1	Lebel	Unpatented	MRO	100%	2010-Jun-01	2% NSR + NM NSR
982172-75	4	Lebel	Unpatented	MRO	100%	2010-Jun-05	2% NSR + NM NSR
1096919-20	2	Lebel	Unpatented	MRO	100%	2010-May-04	2% NSR + NM NSR
3009238	1	Lebel	Unpatented	MRO	100%	2010-Jun-02	0
3006755-56	2	Lebel	Unpatented	MRO	100%	2012-Jun-02	0
	27						

## Lebel Stock

Claim Number	<u>Units</u>	Township	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	Royalty
1214386-94	9	Lebel	Unpatented	MRO	100%	2010-Jun-10	1.5% NSR + NM NSR
1217404	1	Lebel	Unpatented	MRO	100%	2010-Jun-10	1.5% NSR + NM NSR
1045667-73	7	Boston	Unpatented	MRO	100%	2010-Jun-13	NM NSR
1046424-43	20	Lebel	Unpatented	MRO	100%	2010-Jun-09	NM NSR
1046480-90	11	Boston	Unpatented	MRO	100%	2010-Jun-13	NM NSR
1046491-94	4	Lebel	Unpatented	MRO	100%	2010-Jun-17	NM NSR
1046520-39	20	Lebel	Unpatented	MRO	100%	2010-Jun-09	NM NSR
1046550-58	9	Lebel	Unpatented	MRO	100%	2010-Jun-13	NM NSR
1046559-89	31	Boston	Unpatented	MRO	100%	2010-Jun-13	NM NSR
1046607-15	9	Boston	Unpatented	MRO	100%	2010-Jun-13	NM NSR
1046616	1	Boston	Unpatented	MRO	100%	2010-Jun-17	NM NSR
1046746-94	49	Lebel	Unpatented	MRO	100%	2010-Jun-14	NM NSR
1046823	1	Boston	Unpatented	MRO	100%	2010-Jun-13	NM NSR
1046951-55	5	Lebel	Unpatented	MRO	100%	2010-Jun-17	NM NSR
1047111-25	15	Lebel	Unpatented	MRO	100%	2010-Jun-17	NM NSR
1047131-35	5	Lebel	Unpatented	MRO	100%	2010-Jun-17	NM NSR
1047151-69	19	Lebel	Unpatented	MRO	100%	2010-Jun-13	NM NSR
	216		-				

## Munro

<u>Claim Number</u>	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	<u>Interest</u>	Due Date	Royalty
CLM282-105001	31	Lebel	Lease	MRO	100%	2009-Mar-01	INCO NSR + NM NSR
104994	1	Lebel	Lease	MRO	100%	2009-Feb-01	INCO NSR + NM NSR
107125	2	Lebel	Lease	M+SR	100%	2009-Jun-01	INCO NSR + NM NSR
9772	1	Lebel	Patented	MRO	100%	NA	INCO NSR + NM NSR
9688-90	3	Lebel	Patented	MRO	100%	NA	INCO NSR + NM NSR
9691	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9494-95	2	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9985	1	Lebel	Patented	MRO	100%	NA	INCO NSR + NM NSR
9986-87	2	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9994	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9910	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9960	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
CLM281-105079	19	Gauthier	Lease	MRO	100%	2009-Jun-01	INCO NSR + NM NSR
105114	1	Gauthier	Lease	M+SR	100%	2009-Aug-01	INCO NSR + NM NSR
1227221-23	3	Gauthier	Unpatented	MRO	100%	2010-Sep-10	NM NSR
1225507	6	Gauthier	Unpatented	MRO	100%	2010-May-13	NM NSR
1225731	3	Gauthier	Unpatented	MRO	100%	2010-Nov-30	NM NSR
1227326	1	Gauthier	Unpatented	MRO	100%	2010-Oct-16	NM NSR
30270-71	2	Gauthier	Patented	MRO	100%	NA	NM NSR
39483	1	Gauthier	Patented	MRO	100%	NA	NM NSR
40017	1	Gauthier	Patented	MRO	100%	NA	NM NSR
40569-72	4	Gauthier	Patented	MRO	100%	NA	NM NSR
40643	1	Gauthier	Patented	MRO	100%	NA	NM NSR
40718	1	Gauthier	Patented	MRO	100%	NA	NM NSR
30205	1	McElroy	Patented	MRO	100%	NA	NM NSR
31836	1	McElroy	Patented	MRO	100%	NA	NM NSR
27224-25	2	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9147	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
30708-09	2	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
29895	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
41670-72	3	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
33317	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
40315	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
	103						

## Anoki - McBean

<u>Claim Number</u>	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
3893.5	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
3894	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
4239	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
5506	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
5694	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
5732	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
8116	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
8366	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
8471	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
8807	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
8828	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
8977-80	4	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9433-35	3	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9505	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9613-15	3	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
10013	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
19189	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
19262	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
25309	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
30893	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
31046	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
9232	1	Gauthier	Patented	M+SR	100%	NA	INCO NSR + NM NSR
1242075-76	2	Gauthier	Unpatented	MRO	100%	2010-Jul-10	NM NSR
	31						

## Princeton - Mayfair

Claim Number	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
HS182-183	2	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
ED391-392	2	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
485	1	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
529	1	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
813-15	3	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
854	1	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
1065	1	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
9204-05	2	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
9296	1	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
9622-23	2	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
9767	1	Gauthier	Patented	MRO	100%	NA	1.5% NSR + NM NSR
1227176	1	Gauthier	Unpatented	MRO	100%	2010-Sep-01	NM NSR
122180-81	2	Gauthier	Unpatented	MRO	100%	2010-Sep-01	NM NSR
1222220	1	Gauthier	Unpatented	MRO	100%	2010-Sep-01	NM NSR
1242099	1	Gauthier	Unpatented	MRO	100%	2010-Aug-09	NM NSR
1226813	1	Gauthier	Unpatented	MRO	100%	2010-May-11	NM NSR
	23						

# Upper Canada

Claim Number	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	<u>Interest</u>	Due Date	<u>Royalty</u>
LS500-504	5	Gauthier	Patented	M+SR	100%	NA	NM NSR
6317	1	Gauthier	Patented	MRO	100%	NA	NM NSR
6314-16	3	Gauthier	Patented	M+SR	100%	NA	NM NSR
6318-19	2	Gauthier	Patented	M+SR	100%	NA	NM NSR
6321	1	Gauthier	Patented	M+SR	100%	NA	NM NSR
8113-15	3	Gauthier	Patented	M+SR	100%	NA	NM NSR
8371-72	2	Gauthier	Patented	M+SR	100%	NA	NM NSR
8590	1	Gauthier	Patented	M+SR	100%	NA	NM NSR
9094-95	2	Gauthier	Patented	M+SR	100%	NA	NM NSR
9224-27	4	Gauthier	Patented	MRO	100%	NA	NM NSR
9312	1	Gauthier	Patented	M+SR	100%	NA	NM NSR
9365	1	Gauthier	Patented	M+SR	100%	NA	NM NSR
9524-27	4	Gauthier	Patented	MRO	100%	NA	NM NSR
9528-30	3	Gauthier	Patented	M+SR	100%	NA	NM NSR
11521-22	2	Gauthier	Patented	M+SR	100%	NA	NM NSR
10140	1	Gauthier	Patented	M+SR	100%	NA	NM NSR
10143-45	3	Gauthier	Patented	M+SR	100%	NA	NM NSR
10462-63	2	Gauthier	Patented	M+SR	100%	NA	NM NSR
15584-85	2	Gauthier	Patented	M+SR	100%	NA	NM NSR
949740	1	Gauthier	Unpatented	MRO	100%	2010-Nov-13	NM NSR
949781	1	Gauthier	Unpatented	MRO	100%	2010-Nov-13	NM NSR
949827	1	Gauthier	Unpatented	MRO	100%	2010-Nov-13	NM NSR
1226075	1	Gauthier	Unpatented	MRO	100%	2010-Jun-02	NM NSR
1226196-98	5	Gauthier	Unpatented	MRO	100%	2010-Jun-02	NM NSR
1242096	3	Gauthier	Unpatented	MRO	100%	2010-Aug-01	NM NSR
1242097	1	Gauthier	Unpatented	MRO	100%	2010-Aug-01	NM NSR
4202538	1	Gauthier	Unpatented	MRO	100%	2008-Jun-01	0
	57						

## **Upper Beaver**

Claim Number	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
9551-52*	2	McVittie	Patented	M+SR	100%	NA	0
9553-57*	5	Gauthier	Patented	M+SR	100%	NA	0
9150-55 *	6	McVittie	Patented	M+SR	100%	NA	0
9178-80 *	3	McVittie	Patented	M+SR	100%	NA	0
9545-46 *	2	Gauthier	Patented	M+SR	100%	NA	0
2601-02 *	2	Gauthier	Patented	M+SR	100%	NA	0
339-40 *	2	Gauthier	Patented	M+SR	100%	NA	0
7934 *	1	McVittie	Patented	M+SR	100%	NA	0
7055 *	1	McVittie	Patented	M+SR	100%	NA	0
7056 *	1	Gauthier	Patented	M+SR	100%	NA	0
35279 *	1	Gauthier	Patented	M+SR	100%	NA	0
2586-87 *	2	Gauthier	Patented	M+SR	100%	NA	0
2588-89 *	2	McVittie	Patented	M+SR	100%	NA	0
6246 *	1	Gauthier	Patented	M+SR	100%	NA	0
6247 *	1	McVittie	Patented	M+SR	100%	NA	0
106884 (67180) *	1	Gauthier	Lease	M+SR	100%	2013-Aug-1	0
106884 (72883) *	1	Gauthier	Lease	M+SR	100%	2013-Aug-1	0
106884 (67288) *	1	Gauthier	Lease	M+SR	100%	2013-Aug-1	0
3003814-15	12	Gauthier	Unpatented	MRO	100%	2012-Jun-28	0
4210194	8	McVittie	Unpatented	MRO	100%	2008-Mar-24	0
4210195	16	McVittie	Unpatented	MRO	100%	2008-Mar-24	0
4210196	1	McVittie	Unpatented	MRO	100%	2008-Mar-24	0
	72						

<u>Note:</u> Queenston owns a 100% interest of the mineral rights on the Upper Beaver property. On 35 of the claims (marked with an *) Sudbury Contact Mines owns 100% of the diamond rights only.

## Lac - McVittie

Claim Number	<u>Units</u>	<u>Township</u>	<u>Claim Type</u>	<u>Rights</u>	Interest	Due Date	<u>Royalty</u>
767405-09	5	McVittie	Unpatented	MRO	41%	2012-Aug-16	0
767415-19	5	McVittie	Unpatented	MRO	41%	2012-Aug-16	0
767425-29	5	McVittie	Unpatented	MRO	41%	2012-Aug-16	0
767435-39	5	McVittie	Unpatented	MRO	41%	2012-Aug-16	0
767443-47	5	McVittie	Unpatented	MRO	41%	2012-Aug-16	0
767451-57	7	McVittie	Unpatented	MRO	41%	2012-Aug-16	0
767460-66	7	McVittie	Unpatented	MRO	41%	2012-Aug-16	0
1137128-31	4	McVittie	Unpatented	MRO	41%	2012-Nov-16	0
1137134-35	2	McVittie	Unpatented	MRO	41%	2012-Nov-16	0
1110272-76	5	McVittie	Unpatented	MRO	41%	2012-Nov-16	0
1111182-86	5	McVittie	Unpatented	MRO	41%	2012-Nov-16	0
767701	1	McVittie	Unpatented	MRO	41%	2012-Aug-16	0
1185431	1	McVittie	Unpatented	MRO	41%	2012-Jun-20	0
802384	1	McVittie	Unpatented	MRO	41%	2012-Jun-08	0
1202836	1	McVittie	Unpatented	MRO	41%	2012-Aug-26	0
3004567	1	McVittie	Unpatented	MRO	41%	2012-Oct-30	0
1217495	1	McVittie	Unpatented	MRO	41%	2012-May-27	0
	61	-					

<u>Note</u>: Ownership of the Lac-McVittie property is 41% by Queenston, 49% by Barrick Gold and 10% by Sudbury Contact Mines.

The diamond rights are owned 51% by Sudbury Contact Mines and 49% by Barrick Gold.

### Description of Terms Used in Claim Lists

Rights: MRO = Mining Rights Only, M + SR = Mining and Surface Rights,

Royalty: NSR = Net Smelter Return, NPI = Net Profits Interest,

NM NSR = Newmont Mining Net Smelter Return (a graduated 1%-2% NSR based on gold price, 1% NSR below US\$350/oz, 1.5% NSR below US\$400/oz, 2% NSR above US \$400/oz.) INCO NSR = INCO Net Smelter Return (1.3% NSR after production of the first 300,000 oz. of gold)