# **TECHNICAL REPORT**

## on the

# **TOE PROPERTY**

# in the Carmacks Copper-Gold Belt

# Yukon Territory

Toe 1 to 24 (YC46628 to YC46651) Toe 25 - 60 (YC 46674 – YC 46709) Toe 61 to 76 (YC 66548 – YC 66563)

## NTS: 115I/11

# Latitude 62°43'N Longitude 137°25'W

## Whitehorse Mining District

Site Visits: April 19 to 20, 2012 and May 26 - 30, 2009

For Kaiyue International Inc. 3500, 855 – 2nd Avenue SW Calgary, Alberta T2P 4J8

By: Jean Pautler, P.Geo. JP Exploration Services Inc. #103-108 Elliott Street Whitehorse, Yukon Y1A 6C4

August 22, 2012

## **1.0 Executive Summary**

The 1587 hectare Toe property, NTS map sheet 115I/11, is located within the Yukon Plateau, approximately 45 km west of Pelly Crossing and 90 km northwest of Carmacks, which is 175 km by paved highway north of Whitehorse, Yukon Territory. The property is situated in the Whitehorse Mining District centered at a latitude of 62°43'N and a longitude of 137°25'W. Road access exists to Pelly Farm, 13 km north-northeast, and a gravel airstrip is located at Fort Selkirk, approximately 7 km northeast of the property. Kaiyue International Inc. of Calgary, Alberta has signed a Letter of Agreement with BCGold Corp. of Vancouver, British Columbia, 100% owner subject to an NSR royalty, to acquire up to 70% interest in the property. The report is required to complete qualifying transaction requirements with the TSX Venture Exchange.

The Toe property lies within the central portion of the Carmacks copper-gold belt, a 180 km by 60 km-wide north-northwest trending mineralized belt of similar intrusion-hosted copper-gold mineralization. The belt includes the 3600 tonne per day Minto Mine of Capstone Mining Corporation, the advanced stage Carmacks Copper deposit of Copper North Corporation (formerly Western Copper Corporation), and the STU drilled prospect, all hosted by the Granite Mountain Batholith. The Toe property lies 12 km northwest directly along trend from the Minto Mine, which has a measured and indicated resource (to NI 43-101 standards) of 29.9 million tonnes grading 1.22% Cu, 0.46 g/t Au and 4.4 g/t Ag using a cutoff grade of 0.5% Cu (*News release June 9, 2009 at www.capstonemining.com*). The above resource information has not been verified by the author and is not necessarily indicative of the mineralization on the Toe Project which is the subject of this report.

The Toe property is underlain by granodiorite of the Early Jurassic Granite Mountain Batholith intruding Paleozoic metaplutonic rocks and locally metavolcanic rocks of the Yukon Tanana Terrane, near the boundary with upper Triassic and/or older mafic volcanic rocks of the Stikine Terrane to the east. The above lithologies are unconformably overlain by younger basalt flows of the Tertiary to Quaternary Selkirk Group in the southern property area.

The deposit model for the Carmacks copper-gold belt has ranged from digested red-bed copper, to aborted and deformed porphyry, to iron oxide copper gold. The author believes the deposit model to be consistent with that of a calc-alkaline porphyry copper-gold model such as at the Kemess Mine and the Kemess North deposit in central British Columbia, but formed at deeper crustal levels. Similarities exist to the Tropicana gold deposit of AngloGold Ashanti Australia Ltd. in Western Australia, which contains a measured and indicated resource of 50.9 million tonnes of 2.07 g/t Au, under the Australasian Code, with no mineable copper reported (*News release January 23, 2009 at website <u>www.anglogold.com</u>), but with no mineable copper reported. The above resource information has not been verified by the author and is not necessarily indicative of the mineralization on the Toe Project which is the subject of this report.* 

The 2007 to 2008 programs on the Toe property by BCGold Corp. consisted of an airborne magnetic and radiometric geophysical survey over the property, an MMI soil survey, and a 15 line km induced polarization survey, both covering approximately 15% of the property. In 2009 property wide geological mapping, evaluation and prospecting, with concurrent geochemical sampling, was conducted under the direction of the author. No previous exploration has been documented on the Toe property.

The programs undertaken by BCGold Corp. were successful in delineating copper  $\pm$ gold MMI soil anomalies with coincident chargeability and resistivity high anomalies with a favourable magnetic and radiometric geophysical signature 12 km northwest directly along trend from the Minto Mine.

A total of 1058m of diamond drilling in 4 holes was completed on the Toe Project for Kestrel Gold Inc. by, and under option from, BCGold Corp. between July 21 and August 13, 2010 using Kluane Drilling Ltd. of Whitehorse, Yukon Territory. The diamond drilling targeted airborne magnetic anomalies in conjunction with gradient array induced polarization anomalies prospective for Minto-type targets and copper-gold MMI soil anomalies, but holes were drilled parallel, as opposed to perpendicular to foliation and the regional trend. Localized strongly magnetic mafic rich and intensely altered zones, favourable for Minto style mineralization, were intersected but no significant copper-gold assay results were obtained. A 5mm seam of massive chalcopyrite within molybdenum was intersected in KSTL-10-03 at 227.65m associated with a highly fractured K-spar flooded zone with hematite, chlorite and clay alteration, proximal to a northwest trending aeromagnetic lineament (structure).

A contingent two phase exploration program is recommended with a budget of \$675,000. A \$200,000 budget is proposed to complete a concentrated Phase 1 program consisting of 7.2 line km of induced polarization geophysics across the regional strike in areas of favourable coincident copper MMI soil and initial induced polarization geophysical anomalies and a 1,000 sample MMI soil geochemical survey to delineate the extent of current anomalies and cover most of the property. Only 15% of the property has been explored by soil and ground induced polarization to date. This should be followed by a Part 2 1,500m diamond drill program expected to cost \$475,000.

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## 2.0 INTRODUCTION AND TERMS OF REFERENCE

## 2.1 Qualified Person and Participating Personnel

Ms. Jean M. Pautler, P.Geo. was commissioned by Kaiyue International Inc. of Calgary, Alberta to evaluate the geology and mineral potential on the Toe property (consisting of the Toe 1 to 76 claims) situated within the Carmacks copper-gold belt and to make recommendations for the next phase of exploration work in order to test the economic potential of the property. The report is required to complete qualifying transaction requirements with the TSX Venture Exchange.

The report describes the property in accordance with the guidelines specified in National Instrument 43-101 and is based on historical information, a review of the 2007 to 2008 work programs, work conducted on, including an examination and evaluation of, the property by the author between May 26 and 30, 2009, a review of the 2010 drill program and a site visit and core inspection with Darren O'Brien, Vice President of Exploration for BCGold Corp., on April 19 to 20, 2012. In 2009, the author was assisted in the field by Mr. Don Coolidge of Tatogga Lake, British Columbia, an experienced prospector with extensive expertise throughout the Cordillera.

## 2.2 Terms, Definitions and Units

All costs contained in this report are denominated in Canadian dollars. Distances are reported in metres (m) and kilometres (km). GPS refers to global positioning system with co-ordinates reported in UTM grid, Zone 8, Nad 83 projection. Minfile showing refers to documented mineral occurrences on file with the Yukon Geological Survey. DDH refers to diamond drill hole. IP refers to an induced polarization type of geophysical survey useful in detecting the presence of conductive disseminated sulphides.

The term ppm refers to parts per million, which is equivalent to grams per metric tonne (g/t) and ppb refers to parts per billion. The abbreviation oz/ton and oz/t refers to troy ounces per imperial short ton. The symbol % refers to weight percent unless otherwise stated.

Elemental abbreviations used in this report include: gold (Au), silver (Ag), copper (Cu), iron (Fe), arsenic (As), bismuth (Bi), manganese (Mn), sulphide (S) and oxide (O). K-spar refers to potassium feldspar. Minerals found in the Carmacks copper-gold belt include pyrite (iron sulphide), magnetite and hematite (iron oxides), malachite and azurite (both hydrous copper carbonates), chalcopyrite, chalcocite and bornite (copper sulphides) and occasional molybdenite (molybdenum sulphide).

## 2.3 Source Documents

Sources of information are detailed below and include available public domain information and private company data.

- Research of the Minfile data available for the area at <a href="http://servlet.gov.yk.ca/gsmin/index.do">http://servlet.gov.yk.ca/gsmin/index.do</a>.
- Research of mineral titles at <u>http://gysde.gov.yk.ca</u> and <u>http://maps.gov.yk.ca/imf.jsp?site=YGS</u>.
- Review of company reports and annual assessment reports filed with the government at <u>http://199.247.132.58:8000/cgi-bin/gw/chameleon.</u>
- Review publicly available data of Kaiyue International Inc.
- Review of geological maps and reports completed by the Yukon Geological Survey or its predecessors.
- Review of published scientific papers on the geology and mineral deposits of the region and on mineral deposit types.
- Company data and reports of BCGold Corp.
- Discussions with Dr. Maurice Colpron of the Yukon Geological Survey and Dr. Jim Mortenson of the University of British Columbia, both with considerable experience within the belt.
- The author has recent previous independent experience and knowledge of the Carmacks copper-gold belt having worked on the privately owned STU drilled prospect between 2006 and 2009, the Carmacks Copper-Gold Project for BCGold Corp. in 2008 and 2009 and the Minto area properties for Northern Tiger Resources Ltd. in 2010 and 2011.
- Site visit on the property and review of core by the author on April 19 to 20, 2012.
- Work on the property by the author between May 26 and 30, 2009 and a review of the 2007-2008 and 2010 work programs.
- A review of pertinent news releases of BCGold Corp. and of other companies conducting work in the regional area, and a review of publicly available information on Kaiyue International Inc.
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## 2.4 Limitations, Restrictions and Assumptions

The author has assumed that the previous documented work on the property is valid and has not encountered any information to discredit such work. The work was completed under the direction of BCGold Corp. by reputable contractors.

## 2.5 Scope

This report describes the geology, previous exploration history and mineral potential of the Toe property. Research included a review of the historical work that related to the immediate and surrounding area of the property. Regional geological data and current exploration information have been reviewed to determine the geological setting of the mineralization and to obtain an indication of the level of industry activity in the area. The report is required to complete qualifying transaction requirements with the TSX Venture Exchange.

The property was geologically and geochemically examined and evaluated by the author from May 26 and 30, 2009 for BCGold Corp. prior to the 2010 drill program. A site visit and review of the core was completed on April 19 to 20, 2012 for Kaiyue International Inc.

Based on the literature review and property examination recommendations are made for the next phase of exploration work. An estimate of costs has been made based on current rates for drilling, geophysical surveys and professional fees in the Yukon Territory.

## 3.0 RELIANCE ON OTHER EXPERTS

The author has relied in part upon work and reports completed by others in previous years in the preparation of this report as identified under section 2.3, "Source Documents" and section 20.0, "References". The author personally reviewed the data, but thorough checks to confirm the results of such prior work and reports have not been done. The author has no reason to doubt the correctness of such work and reports. Unless otherwise stated the author has not independently confirmed the accuracy of the data.

In regards to section 4.2, Land Tenure, mineral title ownership was identified by the author at <u>http://gysde.gov.yk.ca</u> as indicated in section 2.3, "Source Documents", and at the Whitehorse Mining Recorder's office. The Letter of Agreement was reviewed for this study by the author and details are available at website <u>www.bcgoldcorp.com</u> in the news release dated August 10, 2012.

## 4.0 PROPERTY DESCRIPTION AND LOCATION

### 4.1 Location (Figures 1 and 2)

The Toe property, NTS map sheet 115I/11, covers low rolling hills just southwest of the Yukon River, near its confluence with the Pelly River, approximately 45 km west of Pelly Crossing and 90 km northwest of Carmacks. Carmacks is 175 km by paved highway north of Whitehorse, Yukon Territory (*Figures 1 and 2*). The property is centered at a latitude of 62°43'N and a longitude of 137°25'W (*Figure 2*). The claims cover favourable geology, regional airborne magnetic anomalies and regional stream sediment anomalies that are prospective for Minto and Carmacks Copper style copper-gold mineralization.



## 4.2 Land Tenure (Figures 2 and 3)

The Toe property consists of 76 Yukon Quartz Mining claims covering an area of approximately 1587 hectares in the Whitehorse Mining District (*Figure 2*). The area is approximate since claim boundaries have not been legally surveyed. The mineral claims were located by GPS and staked in accordance with the Yukon Quartz Mining Act on claim sheet 115I/11, available for viewing in the Whitehorse Mining Recorder's Office. A table summarizing pertinent claim data follows.

Claim Name	Grant No	No. of Claims	Record Date	Expiry Date
Toe 1 to 24	YC46628-651	24	20/3/2006	20/03/2017
Toe 25 to 60	YC 46674-709	36	4/4/2006	20/03/2017
Toe 61 to 76	YC 66548-563	16	21/11/2007	21/11/2013
TOTAL		76		

TABLE	1:	Claim	data
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The 100% registered owner of the Toe claims is BCGold Corp. which holds a 100% interest in a larger package of 16 properties (15,925 hectares), including the Toe property, comprising the Carmacks Copper-Gold Project, strategically located proximal and adjacent to Capstone Mining Corp.'s currently producing, high-grade copper-gold Minto Mine and Copper North Mining Corp.'s Carmacks Copper Project (*Figure*)

*3).* BCGold Corp. is the largest land holder in the Carmacks Copper-Gold Belt, having spent approximately \$4 million in exploration expenditures over the past 4 years and discovering 7 copper-gold mineralized zones (*website <u>www.bcgoldcorp.com</u>*).

Kaiyue International Inc. (Kaiyue) has entered into an arm's length Letter of Agreement with BCGold Corp. (BCGold), dated July 25, 2012, whereby Kaiyue can earn up to a 70% interest in the Toe property (*News release August 10, 2012 at website www.bcgoldcorp.com*). Kaiyue can earn a 60% interest through a series of staged payments and issuance of shares to BCGold, totaling \$255,000 cash, 400,000 common shares, and incurring \$1,900,000 in exploration expenditures over 4 years. An additional 10% interest in the Toe property can be earned by Kaiyue completing a bankable feasibility study on or before the date which is four years from the receipt of the Final Approval. The parties expect to enter into a definitive agreement with respect to the transaction on or before August 31, 2012. The Toe property is subject to a 2.5% net smelter returns royalty interest held by BCGold Corp. and a third party.

Timing	\$ Cash	Shares	\$ Expenditures
Signing/Approval*	25,000	100,000*	
Year 1	25,000	100,000	200,000
Year 2	55,000	200,000	400,000
Year 3	50,000		650,000
Year 4	100,000		650,000
TOTAL	\$255,000	300,000	\$1,900,000

 TABLE 2: Option agreement summary

The claims are located within the Traditional Territory of the Selkirk First Nation, which has a land claim settlement agreement under the Yukon Umbrella Final Agreement. A Selkirk First Nation land parcel (surface rights only) is located 1.5 km north of the property (Figure 2). There have been no access concerns or problems encountered in the recent exploration on the property and, considering that land issues have not changed, no foreseeable access or risk concerns have been identified that would impact on continued exploration. The land in which the mineral claims are situated is Crown Land and the mineral claims fall under the jurisdiction of the Yukon Government. Surface rights would have to be obtained from the government if the property were to go into development.

A mineral claim holder is required to perform assessment work and is required to document this work to maintain the title as outlined in the regulations of the Yukon Quartz Mining Act. The amount of work required is equivalent to \$100.00 of assessment work per quartz claim unit per year. Alternatively, the claim holder may pay the equivalent amount per claim unit per year to the Yukon Government as "Cash in Lieu" to maintain title to the claims.

Preliminary exploration activities do not require permitting, but significant drilling, trenching, blasting, cut lines, and excavating may require a Mining Land Use Permit that must be approved under the Yukon Environmental Socioeconomic Assessment Act (YESSA). A permit is currently in place. To the author's knowledge, the Toe Project area is not subject to any environmental liability.

Yukon FORT SELKIRK SFN R-42B Ν airstrip SFN-R-18B 115/14 PEPPER PEPPER 2 PEPPER 2 SEN S-125ES SELKIRK FIRST NATION LAND PEPPER EPPE PEPPER 1151/14 REPPER PEPPER-2 PEPPER 26 PEPPER 1151/11 REPPER PEPPER 11 PEPPER IQ REPPER 3 SFN S-126B1 hepper of REPPER PEPPER PEPPER 2 River TOE PEPPER 2) PEPPER 14 REPPER 2 PEPPER 24 TOE 25 TOE 27 PEPPER 13 PEPPER 14 PEPPER 14 PEPPER 14 PROPERTY TOE 29 TOE 31 PEPPER L TOE 33 TOE 3 2100' TOE 26 TOE 28 TOE 30 TOE 32 TOE 34 TOE 36 1151 025 coal TOE 60 TOE 58 TOE 23 TOE 24 TOE 38 TOE 37 TOE 59 TOE 57 TOE 21 TOE 22 TOE 40 TOE 39 TOE 1 TOE 3 TOE 5 TOE 7 TOE 9 TOE 11 TOE 19 TOE 20 TOE 42 TOE 4 2500' 115/11 TOE 2 TOE 4 TOE 8 TOE 10 TOE 12 TOE 17 TOE 18 TOE 44 TOE 43 2000' TOE 6 TOE 56 TOE 54 TOE 52 TOE 50 TOE 15 TOE 16 TOE 46 TOE 45 TOE 55 TOE 53 TOE 51 TOE 49 TOE 13 TOE 14 TOE 48 TOE 47 **FIGURE 2** Adera WINTER. 1151 024 WINTER TOE 61 TOE 63 TOE 65 TOE 67 TOE 69 TOE 71 TOE 73 TOE 75 **TOE PROPERTY** WINTER I WINTER 6 TOE 62 TOE 64 TOE 66 TOE 68 TOE 70 TOE 72 TOE 74 TOE 76 **CLAIM MAP** from: WINTER WINTER 85 http://maps.gov.yk. ca/ WINTER imf.jsp?site=YGS SCALE WINTER 10 2400' 1 km WINTER ? Creet WINTER IN WINTERS March 31, 2012 Wolverine Minfile occurrence WINTER N Contour interval: 100 feet

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FIGURE 3: CARMACKS COPPER-GOLD PROPERTIES OF BCGOLD CORP.

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

## 5.1 Access, Local Resources and Infrastructure

The property is not road accessible, although a winter road from Fort Selkirk lies 1 km to the east of, and another crosses the northeastern tip of, the property (*Figure 3*). Access is by helicopter from the seasonal Carmacks base of Trans North Helicopters at Carmacks, Yukon Territory. Suitable staging areas include the Minto airstrip, 30 km southeast of the property (*Figure 4*) and 75 km by road northwest of the helicopter base, and Pelly Farm (*Figure 1*). The nearest accessible road to the property is at Pelly Farm (*Figure 4*), 13 km north-northeast of the property, accessible via the Pelly Farm Road from Pelly Crossing, which is 106 km north of Carmacks and 37 km west of Pelly Crossing. Fort Selkirk, a mid 1800's trading post along the Yukon River and current heritage site, lies 7 km northeast of the Toe camp, with a 610m (2000') gravel airstrip situated at 62°46'06"N 137°23'05W, 475m elevation (*Figures 2 and 4*).

A suitable helicopter supported waterless fly camp occurs on the property at 375600E, 6957350N. A spring was located at 375790E, 6957656N. Water is available, particularly early in the season, from swampy northerly flowing tributaries of the Yukon River and swampy southerly flowing tributaries of Wolverine Creek, which flows easterly into the Yukon River.

Carmacks is the closest town of significant size, with a population of approximately 450, a gravel airstrip, suitable for medium sized aircraft, and a seasonal helicopter base. Facilities include a grocery store, nursing station, police station, two service stations, accommodation, two restaurants and a café. Some heavy equipment is available for contract mining work. Complete services are available in Whitehorse, less than two hours by all-weather highway, 175 km south of Carmacks (*Figure 1*).

## 5.2 Physiography, Climate and Infrastructure

The Toe property is located along the eastern flank of the Dawson Range within the Yukon Plateau, covering low rolling hills just southwest of the Yukon River, near its confluence with the Pelly River (*Figure 1*). The hills are cut by shallow, intermittent streams (northerly flowing tributaries of the Yukon River and southerly flowing tributaries of Wolverine Creek) with abundant swamps and permafrost. Wolverine Creek lies just south of the Toe property. Elevation ranges from 1900 feet in the northeastern and southeastern property areas, locally to 2650 feet along an easterly trending ridge through the central property area (*Figure 2*). No ash layer was detected on the property. Permafrost was found to be extensive in the central grid area and in the northern and southern quarters of the grid.

Vegetation is variable with dense to more open spruce forests, locally with pine, broken by open poplar stands. Muskeg and thick willow, birch and alder cover the low swampy ground. The area has a northern interior climate characterized by a wide temperature range with warm summers, long cold winters and light precipitation. Summers are moderately cool to hot, with daily highs of 15°C to 30°C. Winters are cold, with temperatures of -30°C to -40°C common. The exploration season lasts from mid May until October.

Although there does not appear to be any topographic or physiographic impediments, and suitable lands appear to be available for a potential mine, including mill, tailings storage, heap leach and waste disposal sites, engineering studies have not been undertaken and there is no guarantee that such areas will be available within the subject property. The nearest source of power is Minto Mine, which is connected to the Yukon electrical grid.

## 6.0 HISTORY

The Adera Minfile occurrence (Minfile 115I 024), which was staked as the A & D claims in the 1970's, is shown less than 1 km to the east of the southeastern Toe property and north of the Winter property (*Figure 2*). The claims are partially shown in Archer (1972) covering an area southeast of the Winter property. A detailed documentation of the work could not be located and no old workings or cut lines were encountered on the Toe property. The following is a record of the known work history on the Toe claims.

- 1972 Geological mapping and grid soil sampling southeast of Toe by Adera Mining Ltd. in a joint venture with Consolidated Standard Mines Ltd., with disappointing results (Minfile, 2005).
- 2006 Originally staked by Shawn Ryan, with additional ground added in 2007, to cover favourable geology and government regional airborne magnetic and stream sediment anomalies considered prospective for Carmacks copper-gold belt mineralization.
- A 3,295 line km airborne magnetic and radiometric geophysical survey was funded by BCGold Corp. over their Carmacks Copper-Gold Project (*Figure 3*) which included the Toe property. A 320 sample MMI soil survey was subsequently completed by Ryanwood Exploration Ltd for BCGold Corp. on the Toe delineating an open ended significantly anomalous area of copper in the south central portion of the claim block, with the southern portion coincident with a gold MMI soil anomaly, in an area of favourable magnetic signature. Two prospecting traverses were completed by Aurum Geological Consultants Inc. The 2007 programs were completed for BCGold Corp., under option from Shawn Ryan.
- 2008 Completion of a 15 line km induced polarization geophysical survey by Aurora Geosciences for BCGold Corp., under option, covering the area of copper-gold MMI soil anomalies and outlining four features of higher chargeability.
- 2009 Geological mapping, and prospecting with concurrent geochemical sampling (43 grid soil, one rock, one reconnaissance soil and two silt samples) was conducted by the author for BCGold Corp. under option from Ryan.
- 2010 Completion of a 1058m diamond drill program in four holes by BCGold Corp. for Kestrel Gold Inc., under option. BCGold Corp. earned 100% interest from Ryan in October, 2010.

Detailed results of the 2007 to 2009 programs will be discussed under section 9.0, "Exploration" for ease in correlation with current results. The drill program is discussed under section 12.0, "Drilling".

## 7.0 GEOLOGICAL SETTING AND MINERALIZATION

## 7.1 Regional Geology (Figure 4)

The regional geology of the area is primarily summarized from Hood et al. (2009), Gordey and Makepeace (2000), Mortensen and Tafti (2003) and Tafti (2005).

The Toe property lies within the central portion of the Carmacks copper-gold belt, a 180 km by 60 km-wide north-northwest trending mineralized belt of similar intrusion-hosted copper-gold mineralization. The belt includes the Minto Mine (Minfile 115I 021) of Capstone Mining Corporation (formerly Sherwood Copper Corp.), the Carmacks Copper deposit of Copper North Corp (formerly Western Copper Corp.) (Minfile 115I 008 - currently in the permitting process) and the STU prospect (Minfile 115I 011), all hosted by the Granite Mountain Batholith (**GMB**) of the Early Jurassic Aishihik/Long Lake plutonic suite (**EJgA**). The intrusive body at Minto is specifically referred to as the Minto Pluton (**MP**), part of the Granite Mountain Batholith.

The Minto Mine, which started production in October, 2007, is located approximately 12 km southeast of the Toe property. Minto has a measured and indicated resource (to NI 43-101 standards) of 29.9 million tonnes grading 1.22% Cu, 0.46 g/t Au and 4.4 g/t Ag using a cutoff grade of 0.5% Cu (*News release June 9, 2009 at www.capstonemining. com*). The above resource information has not been verified by the author and is not necessarily indicative of the mineralization on the Toe Project which is the subject of this report. New zones continue to be discovered at Minto with the Minto North zone, 600m northwest of Minto, returning 3.0% Cu and 6.0 g/t Au over 32.3m, including 4.7% Cu and 9.8 g/t Au over 8.8m in Hole 09SWC474 (*News release May 26, 2009 at www.capstonemining.com*). Minto North was a purely geophysical discovery.

The regional area of the Carmacks copper-gold belt is underlain by intermediate to felsic intrusive and meta-intrusive rocks of the Early Jurassic Aishihik/Long Lake plutonic suite (EJgA) intruding Paleozoic metaplutonic rocks (YTp) and locally metavolcanic rocks (not in map area) of the Yukon Tanana Terrane, near the boundary with upper Triassic and/or older mafic volcanic rocks of the Stikine Terrane (ST) to the east. The above lithologies are unconformably overlain by younger basaltic to andesitic volcanic rock units of the Late Cretaceous Carmacks Group (uKv) and in the central part of the belt, basalt flows of the Tertiary to Quaternary Selkirk Group (TQv). The Selkirk Group is particularly evident along the north side of the Yukon River at Fort Selkirk and along the canyon walls of Wolverine Creek.

The northwest trending Hoochekoo Fault, which lies just to the northeast of the STU property and the Carmacks Copper deposit, transects the Carmacks copper-gold belt separating the Minto deposit from the Carmacks Copper deposit and the STU property,

The area has been glaciated with overall northwesterly ice directions and local southeast ice directions, particularly in the west.



## 7.2 Property Geology (Figure 5)

Outcrop is limited on the property, comprising less than 10%, and generally confined to rounded ridge lines. The Toe property is primarily underlain by the main K-spar megacrystic granodiorite phase of the Granite Mountain Batholith. The main phase is a massive coarse grained biotite-hornblende granodiorite with 5-15% mafic minerals and potassium feldspar megacrysts. It should be noted that within the Carmacks copper-gold belt mineralization is typically associated with foliated to gneissic granodiorite, more mafic phases and often finer grained variants of the granodiorite.

The granodiorite grades to medium grained in the southwest property area, west of the induced polarization grid. One occurrence of fine grained granodiorite was encountered near 109E/96N, exposed as a small outcrop. Epidote-chlorite altered medium to coarse grained granodiorite, with possible secondary biotite occurs in the area at 107E/98N Very minorly foliated coarse grained K-spar megacrystic granodiorite occurs just west of the induced polarization grid trending northwest to north-northwest, dipping shallowly northeast, and in the northern property area, trending 045°/90°N on L111E.

Slightly younger aplite, pegmatite and felsite dykes are common and tend to predominate in areas of poor exposure due to their higher silica content. They are more prevalent in the eastern property area. Dominant trends are west and northwest, with local northerly trends.

Olivine basalt flows, commonly vesicular, of the Pliocene and younger Selkirk Group overlie the granodiorite in the southern property area. Minor basalt dykes intrude the Granite Mountain Batholith proximal to the main body of basalt. The aeromagnetic signature and a break in an aeromagnetic lineament suggest that the basalts occur as dykes in the southeast property area and do not form part of the larger body. The break in the aeromagnetic lineament also indicates a pre-Selkirk age for the structure.

## 7.3 Mineralization (Figures 3 and 15)

Mineralization within the Carmacks copper-gold belt *(Figure 3)* consists of chalcopyrite and bornite with minor chalcocite as disseminations, irregular grains, aggregates and stringers, associated with more foliated to gneissic zones with magnetite-silica, biotite, hematite, epidote, chlorite and locally sericite alteration. Supergene alteration has produced secondary copper minerals such as chalcocite, azurite and malachite. Mineralization at Minto is flat lying but mineralization at Carmacks Copper and alignment of mineralized zones within the belt generally trend 315-340°.

Open ended copper ±gold MMI soil anomalies with coincident chargeability and resistivity high anomalies with a favourable magnetic geophysical signature occur on the property, 12 km northwest directly along trend from the Minto Mine (*Figure 15*). A 5mm seam of massive chalcopyrite within molybdenum was intersected in DDH KSTL-10-03 at 227.65m associated with a highly fractured K-spar flooded zone with hematite, chlorite and clay alteration. There is extremely limited exposure on surface, hampering exploration.



## 8.0 DEPOSIT TYPE

The Toe property lies within the central portion of the Carmacks copper-gold belt, a 180 km by 60 km-wide north-northwest trending mineralized belt of similar intrusion-hosted copper-gold mineralization that includes the Minto Mine of Capstone Mining Corporation (12 km southeast directly along trend from the Toe), for which a metamorphosed copper-gold porphyry deposit model was proposed by Pearson and Clark (1979). The same genesis was proposed for the Minto and the Carmacks Copper deposits by Tafti and Mortensen (2004). The deposit model for mineralization within the Carmacks copper-gold belt has ranged from digested red-bed copper, to aborted and deformed porphyry, to iron oxide copper gold (*Hood et al., 2009*).

It has been documented that the Minto and Carmacks Copper deposits are hosted by variably deformed plutonic rocks that occur as pendants and schlieren within slightly younger less deformed intermediate intrusive rocks of the Granite Mountain Batholith *(Tafti and Mortensen, 2004).* Petrographic and field studies of the more gneissic host rocks from Minto and Carmacks Copper show that they represent strongly deformed and metamorphosed intrusive rocks (orthogneiss), with the excess amount of biotite representing secondary (hydrothermal) biotite associated with strong hypogene potassic alteration *(Tafti and Mortensen, 2004).* 

Hornblende geochemical studies of plutonic and meta-plutonic host rocks at Minto and Carmacks Copper indicate that they formed in a continental magmatic arc setting *(Tafti and Mortensen, 2004)*. The setting, timing of mineralization and petrographic and field observations of the host rocks, mineralization and alteration led Tafti and Mortensen (2004) to conclude that the two deposits represent variations on typical copper (-gold) porphyry deposits.

It should be noted that schlieren are fragile, usually elongate concentrations of mafic material within some intrusions. Genesis may be due to shearing of heterogeneities (enclaves or xenoliths), crystal sorting during convective or magmatic flow, or crystal settling.

Recent work at the Carmacks Copper deposit has suggested that the highly foliated rocks controlling economic mineralization are rafts and lenses (xenoliths) of augite-phyric volcanic rocks of the Povoas Formation within the Granite Mountain Batholith *(Maurice Colpron, personal communication).* The Povoas Formation occurs at the base of the Triassic aged Lewes River Group, part of Stikinia, and is exposed to the northeast of the Granite Mountain Batholith *(see Figure 4).* Similar mineralization at the Minto deposit has been described as being hosted by zones of strongly developed penetrative foliation, interpreted as shears or as rafts of volcanic rock within the granodiorite host. Studies are currently underway to evaluate the genesis of the Minto Mine *(Hood et al., 2009).* 

Calc-alkaline porphyry copper-gold mineralization at the Kemess Mine (Kemess South deposit) and the Kemess North deposit in central British Columbia is hosted by Jurassic granodiorite intrusions and adjacent Upper Triassic augite-phyric flows of the Takla Group, indicating similar chemistry, age and deposit characteristics to mineralization within the Carmacks copper-gold belt. The main difference is the lack of foliated rocks associated with the mineralization.

Similarities may exist to the Tropicana gold deposit of AngloGold Ashanti Australia Ltd. in Western Australia (*Fonseca, in Pautler, 2009*) which contains a measured and indicated resource of 50.9 million tonnes of 2.07 g/t Au, under the Australasian Code, with no mineable copper reported (*News release January 23, 2009 at website* <u>www.anglogold.com</u>). The above resource information has not been verified by the author and is not necessarily indicative of the mineralization on the Toe Project which is the subject of this report. Tropicana has been described as a metamorphosed intrusion related gold deposit. Current work is focusing on whether the deposit is in fact a metamorphosed Archean deposit or formed during metamorphism in the Proterozoic.

Tropicana is hosted within high grade metamorphic gneissic rocks and associated with late biotite and pyrite alteration *(AngloGold Ashanti website)*. Minto is hosted within upper greenschist metamorphosed gneissic rocks, associated with late biotite alteration and pyrite alteration is documented peripherally. The presence of ubiquitous magmatic epidote is reported at Minto, suggesting depths of formation of 18 to 20 km, which far exceeds typical depths of deposition for porphyry style deposits *(Tafti, 2005)*.

Based on the above discussion, the author believes that mineralization within the Carmacks copper-gold belt is hosted by schlieren zones (including some volcanic xenoliths) within Jurassic granodiorite and is consistent with a calc-alkaline porphyry copper-gold model (with similarities to the Kemess Mine and Kemess North deposit) but formed at a deep crustal level.

## 9.0 EXPLORATION (Figures 5-11)

No exploration work has been undertaken by Kaiyue International Inc. on the Toe Project. Exploration by BCGold Corp. since the initial granting of the option from Shawn Ryan in March, 2007 has involved an airborne magnetic and radiometric geophysical survey, a 320 sample MMI soil survey, 15 line km of induced polarization, and property-wide geological mapping and prospecting with coincident geochemical sampling.

## 9.1 **Previous Geochemistry**

## 9.1.1 MMI Soil (Figures 6 and 7)

MMI soil sampling was completed primarily on the southern half of the Toe property in 2007 by Ryanwood Exploration Inc. of Dawson City, Yukon (a company owned by the original vendor of the property, Shawn Ryan) for BCGold Corp. A total of 320 MMI samples, including blank and duplicate samples, were collected along six 360°, three 090° and two and a quarter discontinuous 320° trending lines, covering approximately 15% of the property. Samples were sent to, and processed at, SGS Mineral Services in Toronto. MMI sampling is an analytical process that measures mobile metal ions reported to be useful in detecting mineralization beneath younger cover rocks and thick glacial till.

Samples were collected using soil augers and mattocks, whichever was appropriate depending on vegetative cover and the thickness of the organic horizon. Generally

samples were collected 10-25 cm below the base of the organic horizon, were placed in plastic zip-lock bags and then into pre-numbered Kraft soil bags. The auger or mattock was cleaned after each sample with a J-cloth to avoid contamination. Response ratios were calculated by determining the average value of the sample population and dividing each result by the average (*Doherty, 2008*). Contoured copper and gold response ratios are shown in Figures 6 and 7.

The copper results show a north to northwest trending anomaly through the southern induced polarization grid area, limited by the extent of sampling (*Figure 6*). The southern half of the copper anomaly is coincident with a gold anomaly (*Figure 7*). Limited sampling in the northern grid area partially delineated a copper anomaly at the north end, and to the north, of the grid (*Figure 6*).

## 9.1.2 Reconnaissance (Figure 8)

During the process of geological mapping and prospecting by the author in 2009, one rock, one reconnaissance soil, two silt and forty-three grid soil samples were collected. Four rock samples were collected in 2007 during two prospecting traverses by geologists Ann Doyle and Peter Ledwidge, employed by Aurum Geological Consultants Inc. for BCGold Corp.

Due to limited exposure, only one rock grab sample was collected in 2009 and four in 2007. The reconnaissance soil sample was collected from the B horizon with a rock hammer to evaluate an area of limited exposure. The grid soils were collected from the B horizon using augers along the induced polarization lines in areas not previously sampled to further delineate the MMI soil anomalies. The silt samples were collected from small bars within the creeks draining the southwest property area to evaluate the drainage basins. Rock samples were placed in clear plastic sample bags and soil and silt samples in waterproof Kraft bags. All samples were located and recorded by GPS in the field using UTM coordinates, Nad 83 datum, Zone 8 projection, numbered and secured in the field.

All 2007 and 2009 samples were sent to Eco Tech Laboratory Limited (Alex Stewart Geochemical) for gold and ICP analysis. Details are discussed under Section 10.0, "Sample Preparation, Analysis And Security". Sample locations are plotted on Figure 8.

No significant anomalous results were obtained from the rock, reconnaissance soil or silt samples. It should be noted that there is extremely limited exposure in the areas of copper MMI soil anomalies. The conventional grid soils collected to the east of the copper MMI soil anomaly on L109E did not return anomalous results. The absence of an anomaly may be due to cover by the younger Selkirk basalts since the granodiorite/ basalt contact would closely follow L111E in this area and conventional soils would not detect mineralization beneath the basalts.

Despite limited sampling due to permafrost a conventional soil anomaly was detected on L103E/97-9750N suggesting continuity of the copper MMI soil anomaly to the west. Additional sampling is necessary to delineate the extent of the anomaly. Another anomaly was detected on L103E at 10650N and 10750N in an area not previously sampled.





![](_page_23_Figure_0.jpeg)

### 9.2 Previous Geophysics (Figures 9-11)

In 2007 a 3,295 line km airborne magnetic and radiometric geophysical survey was flown by Aeroquest Surveys, Mississauga, Ontario for BCGold Corp. over their Carmacks Copper-Gold Project which included the Toe property. The total field magnetic map is shown as a base in Figure 9. The magnetic signature in the southern property area confirms that the area is underlain by basaltic rocks, as suggested by the presence of Selkirk basalt float. The magnetic signature in the southeastern area suggests that the basalt here may occur as dykes. Favourable moderate magnetic high anomalies correspond to copper MMI soil anomalies in the southern and northeast grid areas. Some west to northwesterly trending lineaments were evident, which have been shown on the geology map in Figure 5. The disruption of the southernmost easterly trending lineament further suggests that the basalt in the southeastern property area occurs as dykes.

The airborne radiometric survey shows that most of the Toe property is underlain by a thorium/potassium low which is also evident in the northern Minto deposit.

A fifteen line km gradient array induced polarization survey was completed in 2008 by Aurora Geosciences Ltd. for BCGold Corp. covering the area of copper-gold MMI soil anomalies delineated in 2007. The survey was undertaken along five 3.0 km long, 360° trending lines, 200m apart. The line direction is suitable if the easterly trending aplite dyke orientations are the dominant foliation direction, but mapping in 2009 delineated more northwest dyke orientations and foliations, and only one foliation was noted trending northeast and dipping steeply. Northwest trends predominate within the Carmacks copper-gold belt.

The survey outlined four areas of higher chargeability denoted A, B, C and D on Figure 10. Results of the survey are summarized from Newton, 2009.

Area A exhibits coincident chargeability and resistivity highs in an area of no MMI coverage. Area B exhibits coincident chargeability and resistivity highs just north of the main copper MMI soil anomaly but not coincident with the gold MMI soil anomaly. Area C has high chargeability along the southern edge of an area of low resistivity, consistent with that of a flat-lying conductor, in an area of no MMI coverage. Area D has high chargeability coincident with an area of elevated MMI copper values on L105E, in an area of low to moderate resistivity. The induced polarization signature is consistent with a horizontal conductor. Depths to the conductors could not be determined.

![](_page_25_Figure_0.jpeg)

![](_page_26_Figure_0.jpeg)

![](_page_27_Figure_0.jpeg)

## 10.0 Drilling (Figures 5 and 12-14)

No drilling has been conducted on the Toe property by Kaiyue International Inc. A total of 1058m of diamond drilling in 4 holes was completed on the Toe Project for Kestrel Gold Inc. by and under option from BCGold Corp. between July 21 and August 13, 2010 at a cost of \$412,871.71. The diamond drilling was carried out by Kluane Drilling Ltd. of Whitehorse, Yukon Territory utilizing a KDHT 600 drill with NTW thin-walled wireline tools. Core is stored at the Pelly River Ranch, which served as the drill camp, at 384208mE, 6968916mN, Nad 83, Zone 8 projection. The core was located and examined by the author on April 19, 2012. Core blocks and sample tags were observed and positively correlated with drill logs in Sidhu (2011). Drill collars are shown with the geology in Figure 5 and cross sections are shown in Figures 12 to 14.

Diamond drill core recoveries were generally good in KSTL-10-01 and -02, averaging above 90%. Recovery was poor in KSTL-10-03, and KSTL-10-04 shows a low recovery of 69%, but recoveries were not calculated for 165m of core in the centre, so could be much higher.

A FlexIt MultiSmart survey tool was utilized for down hole surveys. Single Shot down hole surveys were completed after every shift and multi shot surveys were completed at the end of the hole. The drilling was helicopter supported by HeliDynamics Ltd, of Whitehorse, Yukon. The drill holes were surveyed in using a hand held GPS unit and a Brunton compass. All drill sites were inspected by the author on April 20, 2012, verifying locations. Diamond drill hole specifications are summarized in Table 4, below.

Drill Hole Number	Easting Nad 83	Northing Nad 83	Elev (m)	Az. (°)	Dip (°)	Length (m)	Core Recovery
KSTL-10-01	375866	6955709	674	180	-60	240.79	95%
KSTL-10-02	375784	6957708	661	155	-65	300.53	91%
KSTL-10-03	376430	6957247	761	180	-65	260.67	79%
KSTL-10-04	376217	6955596	711	180	-60	256.03	69%+
TOTAL						1058.02	

Table 4: Diamond drill hole specifications

Drill holes KSTL-10-01 to -03 were targeted on airborne magnetic anomalies in conjunction with gradient array induced polarization anomalies similar to Minto-type targets, and KSTL-10-04 targeted an MMI gold anomaly (*Figures 5 to 10*). A total of 243 samples of drill core were submitted for analysis. Although the diamond drill holes were drilled sub-parallel to parallel (as opposed to perpendicular) to the regional 315-335° trend of mineralization, minor mineralization, significant alteration, and several strongly magnetic mafic rich zones were encountered within the granodiorite. Mineralization within the Carmacks copper-gold belt is typically associated with foliated to gneissic granodiorite, more mafic phases and often finer grained variants of the granodiorite, with magnetite-silica, potassic (biotite or K-spar), hematite, epidote, chlorite and locally sericite alteration.

Holes KSTL-10-02 and -03 (*Figures 13 and 14*), in the northern property area targeting chargeability high anomalies, intersected granodiorite with aplite and pegmatite dykes. A 5mm seam of massive chalcopyrite within molybdenum was intersected in KSTL-10-03 at 227.65m associated with a highly fractured K-spar flooded zone with hematite, chlorite and clay alteration (*Sidhu, 2011*). An examination of this intersection by the author showed extensive fault gouge through this section. A rock chip with minor

chalcopyrite and molybdenum mineralization in quartz was observed at the core splitter. Numerous faults were encountered in this hole probably resulting in the poor core recoveries. The poor recoveries encountered, especially in the vicinity of the mineralized zone, may have resulted in the loss of sulphide bearing sections, since soft sulphide mineralization tends to be more readily ground up and lost. Localized zones of weak to moderately mafic rich foliated granodiorite associated with silica alteration were encountered in the lower two thirds of KSTL-10-02. Mineralization, alteration and more mafic rich foliated granodiorite within the holes appears to increase towards a northwest trending aeromagnetic lineament (probably representing a structure) located a few hundred metres south of the hole collars.

Holes KSTL-10-01 and -04 (*Figure 12*), in the southern property area, intersected magnetic basalt flows underlain by granodiorite with basalt down to 72.8m in DDH 1 and down to 28m in DDH 4. This confirms the thinning of the basalt pile to the east, giving way to basalt dykes further to the east. Thick overburden (71.65m) was encountered in KSTL-10-01, which may be the cause of the induced polarization anomaly. Significant but localized alteration, consisting of hematite, silica and fine grained and mafic phases of the granodiorite, were intersected just below centre (between 124 and 153m) in KSTL-10-04 (*Sidhu, 2011*).

## **10.1 Drill Sampling Method and Approach**

The drill sampling procedure and approach is summarized from Sidhu (2011).

The core was delivered to the core processing site, a temporary tent erected near camp. Block markers in imperial units were first converted into metric units and the core was then metered with a yellow grease pencil. Total Core Recovery (TCR), Rock Quality Designation (RQD), and Rock Hardness were measured and entered into a laptop computer. Readings of magnetic susceptibility were taken every 50 cm using a Czech Geofyzika, a.s. micro-Kappa Kappameter and entered into the laptop. Finally interval lengths and descriptions of lithology, alteration, structure, mineralization, and sample intervals were all entered. Lithological units less than 0.3m were generally not noted unless of specific interest. All core logging and sampling was completed by Gary Sidhu of BCGold Corp. As the core boxes were being moved to the cutting and sampling tent, they were labeled with aluminum tags and photographed.

After logging, intervals for geochemical analysis were selected for sampling, primarily chosen for their potential to contain copper and gold, but also based on alteration, lithology, and to characterize background values for some rock units (for example dykes). The selected core samples were marked both on the core and on the core box in red grease pencil. Sample lengths varied between 0.13 and 1.3m and averaged 0.58m in length. A total of 243 samples of drill core were submitted for analysis with 43 additional QAQC samples. Drill core samples were cut with a diamond saw, and one half of the core replaced in the core box for future reference, and the other half bagged in numbered plastic bags, placed in rice bags and sealed for shipping. The field duplicates consisted of quartering the remaining half core. Core samples were tracked by three-part sample tag books. One part was placed in the core box at the end of the assay interval, one tag went with the sample for assay and the last tag was kept as a record.

![](_page_30_Figure_0.jpeg)

![](_page_31_Figure_0.jpeg)

![](_page_32_Figure_0.jpeg)

### 11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

The 286 samples from the 2010 drill program were delivered directly to the Whitehorse lab of Eco Tech Laboratories Ltd. by a BCGold representative at the completion of the program, with chain of custody documented. Eco Tech Laboratories is a subsidiary of the global Stewart Group, a British Columbia Certified Assayer, which maintained an ISO 9001:2000 certified laboratory in Whitehorse for sample preparation, and a certified analytical lab in Kamloops, British Columbia, where the pulps were forwarded for analysis. All 2009 samples were placed in rice bags in the field by the author and secured. The 2007 and 2009 samples were delivered to the sample preparation laboratory of Eco Tech Laboratory Limited (Stewart Group) in Whitehorse for preparation. Eco Tech Laboratory Limited was acquired by ALS Laboratory Group in 2011.

Sample preparation at the laboratory involved cataloguing and drying. Rock and core samples are 2 stage crushed to minus 10 mesh and a 250 gram subsample is pulverized on a ring mill pulverizer to -140 mesh. The subsample is rolled, homogenized and bagged in a pre-numbered bag. Soils were prepared by sieving through an 80 mesh screen to obtain a minus 80 mesh fraction. Samples unable to produce adequate minus 80 mesh material are screened at a coarser fraction. These samples are flagged with the relevant mesh.

Samples were then internally sent directly to Eco Tech's facility in Kamloops, British Columbia for analysis. All samples were analyzed by Eco Tech for Al, Sb, As, Ba, Bi, Cd, Ca, Cr, Co, Cu, Fe, La, Pb, Mg, Mn, Mo, Na, Ni, P, Ag, Sr, Ti, Sn, W, U, V, Y and Zn using a 28 element ICP package which involves a nitric-aqua regia digestion. Gold was analyzed by fire assay with an atomic absorption finish using a 30g sub-sample. In the drill program copper was assayed by atomic absorption and ICP following a four acid digestion. Complete laboratory sample preparation and analysis procedures are outlined in Table 3. Eco Tech was an ISO 9001 accredited facility, registration number CDN 52172-07.

Quality assurance and control procedures (QAQC) were implemented at the laboratory, involving the regular insertion of blanks and standards and repeat analyses of at least 25% of the samples, with re-analyses being performed for one sample in each batch on the original sample prior to splitting (resplit). Field blank and duplicate samples were submitted for quality control in the MMI survey and one duplicate was collected in the 2009 conventional soil survey. Quality control by BCGold during the 2010 drill program consisted of the insertion of 14 certified standard samples, 15 blanks, and 14 duplicates into the sample shipment stream for a total of 43 additional QAQC samples. The standards utilized were CDN-CGS-12 (0.265% Cu, 0.29 g/t Au) and CDN-CGS-15 (0.451% Cu, 0.57 g/t Au). Analytical data quality assurance and quality control was indicated by the favourable reproducibility obtained in laboratory and company inserted standards, blanks and duplicates. Field duplicates for soils and drill core also showed favourable reproducibility. All analyses were within acceptable limits for Cu and Au.

There is no evidence of any tampering with the samples during collection, shipping, analytical preparation or analysis. All sample preparation was conducted by the laboratory. The laboratory is entirely independent from the issuer. In the author's opinion, the sample preparation, analysis and analytical procedures are adequately reliable for the purposes of this technical report.

### 12.0 DATA VERIFICATION

The 2007, 2009 and 2010 geochemical data was verified by the author by sourcing original analytical certificates and digital data. Analytical data quality assurance and quality control was indicated by the favourable reproducibility obtained in laboratory and company inserted standards, blanks and duplicates. Field duplicates for soils and drill core also showed favourable reproducibility. All analyses were within acceptable limits for copper and gold. Quality control procedures are documented in section 11.0, "Sample Preparation, Analysis And Security". In the author's opinion, the data is adequately reliable for the purposes of this technical report.

## 13.0 ADJACENT PROPERTIES (Figures 2, 3 and 15)

The Toe property is adjoined by the Pepper property to the northwest and the Winter property to the southeast, both registered to BCGold Corp. and at an early stage of exploration. (*Refer to Figure 15.*)

## 14.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The Toe property is at an early exploration stage and no mineralization has been encountered, therefore no metallurgical testing has been carried out. However, mineralization would be expected to be similar to that at the Minto Mine.

## 15.0 MINERAL RESOURCE ESTIMATE

There has not been sufficient work on the Toe property to undertake a resource calculation.

## 16.0 OTHER RELEVANT DATA AND INFORMATION

To the author's knowledge, there is no additional information or explanation necessary to make this technical report understandable and not misleading.

### 17.0 INTERPRETATION AND CONCLUSIONS

The Toe property constitutes a property of merit based on the presence of a favourable magnetic and radiometric geophysical signature, and copper  $\pm$ gold MMI soil anomalies with coincident chargeability and resistivity high anomalies 12 km along trend from the Minto Mine (*Figure 15*). Exploration in the Toe property area has been hampered by lack of exposure, overburden cover, and presence of permafrost. Historical exploration appears to have been concentrated on areas more proximal to the Minto and Carmacks

Copper deposits, with claims in the 1970's documented to just southeast of the Toe property.

The following interpretation and correlation of the geology, geophysics and soil geochemistry refers to the geophysical anomalous areas (A, B, C and D) as shown on Figures 10 and 11, with references to the MMI soil geochemistry on Figures 6 and 7 and the geology on Figure 5.

The granodiorite grades to medium grained in the southwest property area (a more favourable host for mineralization within the Carmacks copper-gold belt), west of the induced polarization grid. No geochemistry or geophysics has been undertaken in this area.

One occurrence of fine grained granodiorite (a more favourable host for mineralization within the belt) was encountered near 109E/96N, exposed as a small outcrop at the north edge of the copper MMI soil anomaly. Epidote-chlorite altered medium to coarse grained granodiorite, with possible secondary biotite occurs in the area at 107E/98N, in an area not soil sampled. This favourable geology occurs proximal to the Area B coincident chargeability and resistivity high anomaly at L107E/9575N.

Very minorly foliated coarse grained K-spar megacrystic granodiorite occurs just west of the induced polarization grid trending northwest to north-northwest, dipping shallowly northeast, in an area not covered by geochemistry or geophysics, and in the northern property area, trending 045% on L111E, just south of a copper MMI anomaly. Mineralization within the Carmacks copper-gold belt commonly occurs within foliated zones within the intrusion.

MMI anomalies in the southern grid area occur in an area underlain by swamp and pervasive permafrost and may be suspect. The extensive permafrost saturated overburden in KSTL-10-01 appears to be the cause of the induced polarization chargeability anomaly D. Although exposure is extremely limited throughout the area, it appears to be primarily underlain by basalt, as supported by the intersection of basalt in KSTL-10-01 and -04. It is still possible that the MMI is detecting anomalies beneath the basalt cover.

In conclusion the Toe property has potential to host mineralization similar to that within the Carmacks copper-gold belt such as at the Minto and Carmacks Copper deposits. The 2007 to 2009 programs undertaken by BCGold Corp. were successful in delineating copper MMI soil anomalies with coincident chargeability and resistivity high anomalies with a favourable magnetic and radiometric geophysical signature 12 km northwest directly along trend from the Minto Mine.

The small 2010 diamond drill program, consisting of 1058m in 4 holes, for Kestrel Gold Inc. by, and under option from, BCGold Corp. intersected localized strongly magnetic mafic rich and intensely altered zones, favourable for Minto style mineralization, but no significant copper-gold assay results were obtained. A 5mm seam of massive chalcopyrite within molybdenum was intersected in KSTL-10-03 at 227.65m associated with a highly fractured K-spar flooded zone with hematite, chlorite and clay alteration. The holes were drilled parallel, as opposed to perpendicular, to foliation and the regional trend. Westerly directed holes are recommended in future drill programs.

![](_page_36_Figure_0.jpeg)

The Toe Project is at an early stage of exploration, and as such considered a high risk. There are no specific risks that the author foresees that would impact continued exploration and development of the property. The above interpretations and the following recommendations for work are based on the results of geochemical and geophysical surveys, which are subject to a wide range of interpretation. Although the author believes that the surveys on the property are scientifically valid, evaluating the geological controls on mineralization is hampered by a lack of rock exposure. At the present time and for the foreseeable future, the project is not generating any cash flow.

## 18.0 RECOMMENDATIONS AND BUDGET

Based on the presence of a favourable geology, magnetic and radiometric geophysical signature, and copper–gold MMI soil anomalies with coincident chargeability and resistivity high anomalies 12 km along trend from the Minto Mine, further work is recommended on the Toe property. Only 15% of the property has been explored by soil and ground induced polarization. Consequently, a concentrated Phase 1 program of geophysics and MMI soil geochemistry is recommended across the property.

A pole-dipole induced polarization geophysical survey is recommended more perpendicular to the regional trend of approximately 315-335°. East-west trending L100N is already cut for 800m and could be extended an additional 1200m to the west and 400m to the east to facilitate the survey. Lines 91N and 105N, each 2.4 km long, should also be cut and surveyed with induced polarization.

Additional MMI soil sampling is recommended to delineate the extent of existing anomalies and to evaluate the remainder of the property (*Figure 15*). Medium grained granodiorite, a more prospective host for mineralization within the belt, occurs in the southwest property area and chalcopyrite and molybdenum mineralization were intersected in KSTL-10-03, proximal to the intersection of two aeromagnetic lineaments (fault intersection). Copper in MMI soil anomalies remain open to the south and northwest of the central MMI grid area and an anomaly is emerging in the northern property area (*Figure 6*).

Potential drill targets are proposed based on the integration of the limited geological information available with the geophysics and copper and gold MMI soil anomalies and results from the diamond drill program. The targets are tentative and the Phase 2 drill program should integrate results from the Phase 1 program, which is anticipated to generate additional targets. Westerly directed holes are recommended in future drill programs. Initial proposed drill hole specifications are tabulated below, but are tentative and may change based on results from the Phase 1 program.

DDH No.	Grid Northing	Co-ord. Easting	Az. (°)	Dip (°)	Depth (m)	Target
P-1	10450N	111E	230	-60	300	fault intersection
P-2	104N	106E	270	-60	250	chargeability high (C)
P-3	96N	L108E	270	-60	250	chg, res, (B) edge of Cu in MMI
TOTAL:			-		800	

 TABLE 2: Proposed drill hole specifications

chg denotes chargeability high: res denotes resistivity high

Based on the above recommendations, the following contingent two phase exploration program with corresponding budget is proposed:

#### Phase 1 - geophysics and geochemistry:

Phase 1 & 2 TOTAL:	\$675,000
Phase 2 TOTAL:	\$475,000.00
contingency	50,000
<ul> <li>preparation, report and drafting</li> </ul>	20,000
<ul> <li>geochemistry (100 rocks @ \$35/ea)</li> </ul>	7,000
<ul> <li>accommodation/camp, food, field supplies, communication</li> </ul>	26,000
helicopter	20,000
<ul> <li>wages (geologist, core splitter, supervision)</li> </ul>	52,000
<ul> <li>diamond drilling (1,500m @ \$200/m all in)</li> </ul>	\$300,000
Phase 2 - drilling: (contingent on results of Phase 1)	
Phase 1 TOTAL:	\$200,000.00
contingency	30,000
<ul> <li>preparation, report and drafting</li> </ul>	20,000
<ul> <li>soil assays (1000 MMI soils @ \$40/ea</li> </ul>	40,000
<ul> <li>geochemistry (1000 MMI soils @ \$40/ea, labour &amp; helicopter)</li> </ul>	40,000
<ul> <li>accommodation/camp. food. communication</li> </ul>	10,000
<ul> <li>heliconter</li> </ul>	10,000
<ul> <li>wages (supervision &amp; geologist)</li> </ul>	10,000
<ul> <li>induced polarization geophysics (7.2 line km @ 4.000/km)</li> </ul>	30 000
<ul> <li>linecutting (64 line km)</li> </ul>	\$10,000

### 19.0 SIGNATURE PAGE

Respectfully submitted,	Effective Date: August 22, 2012
"Jean Pautler"	Signing Date: August 22, 2012
Jean Pautler, P.Geo.	

The signed and sealed copy of this Signature page has been delivered to Kaiyue International Inc.

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#### 21.0 CERTIFICATE, DATE AND SIGNATURE

- 1) I, Jean Marie Pautler of 103-108 Elliott Street, Whitehorse, Yukon Territory am selfemployed as a consultant geologist, authored and am responsible for all sections of this report entitled "Technical report on the Toe property", dated August 22, 2012.
- 2) I am a graduate of Laurentian University, Sudbury, Ontario with an Honours B.Sc. degree in geology (May, 1980) with 30 years mineral exploration experience in the North American Cordillera. Pertinent experience includes the acquisition and delineation of the Tsacha epithermal gold deposit, British Columbia and the evaluation of various deposit types including porphyry for Teck Exploration Limited, drilling the Brenda gold-copper porphyry property in the Kemess Camp for Northgate Exploration Limited, work throughout the Dawson Range including the Freegold Project of Northern Freegold Resources Limited and work on the STU prospect within the Carmacks copper-gold belt.
- 3) I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia, registration number 19804.
- 4) I have visited the subject mining property of this report and am a "Qualified Person" in the context of and have read and understand National Instrument 43-101 and the Companion Policy to NI 43-101. This report was prepared in compliance with NI 43-101.
- 5) This report is based upon examination of the drill core and a site visit on the property by the author on April 19 to 20, 2012, work on the property by the author between May 26 and 30, 2009, work on the South Block of the Carmacks copper-gold Project for BCGold Corp. in 2008, a review of the 2007-2008 and 2010 work programs, the author's personal knowledge of the region, and a review of pertinent data.
- 6) As stated in this report, in my professional opinion the property is of potential merit and further exploration work is justified.
- 7) At the effective date of the technical report, to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- 8) I am entirely independent, as defined in section 1.5 of National Instrument 43-101, of Kaiyue International Inc. and any associated companies. I do not have any agreement, arrangement or understanding with Kaiyue International Inc. and any affiliated company to be or become an insider, associate or employee. I do not own securities in Kaiyue International Inc. or any affiliated companies and my professional relationship is at arm's length as an independent consultant, and I have no expectation that the relationship will change. I am also entirely independent, as defined in section 1.5 of National Instrument 43-101, of BCGold Corp. and the Toe property.

Dated at Carcross, Yukon Territory this 22<sup>nd</sup> day of August, 2012,

"Signed and Sealed"

<u>"Jean Pautler"</u>

Jean Pautler, P.Geo. (APEGBC Reg. No. 19804) JP Exploration Services Inc. #103-108 Elliott St. Whitehorse, Yukon Y1A 6C4

The signed and sealed copy of this Certificate, Date and Signature page has been delivered to Kaiyue International Inc.

## Table 3: Geochemical Procedure

## **Analytical Method for**

## **GEOCHEMICAL GOLD ANALYSIS**

Samples are catalogued and dried. Soils are prepared by sieving through an 80 mesh screen to obtain a minus 80 mesh fraction. Samples unable to produce adequate minus 80 mesh material are screened at a coarser fraction. These samples are flagged with the relevant mesh. Rock samples are 2 stage crushed to minus 10 mesh and a 250 gram subsample is pulverized on a ring mill pulverizer to -140 mesh. The subsample is rolled, homogenized and bagged in a pre-numbered bag.

The sample is weighed to 10/15/30 grams and fused along with proper fluxing materials. The bead is digested in aqua regia and analyzed on an atomic absorption instrument. Over-range values for rocks are re-analyzed using gold assay methods.

Appropriate reference materials accompany the samples through the process allowing for quality control assessment. Results are entered and printed along with quality control data (repeats and standards). The data is faxed and/or mailed to the client.

### GOLD ASSAYS

Samples are sorted and dried (if necessary). The samples are crushed through a jaw crusher and cone or rolls crusher to -10 mesh. The sample is split through a Jones riffle until a -250 gram subsample is achieved. The subsample is pulverized in a ring & puck pulverizer to 95% - 140 mesh. The sample is rolled to homogenize.

For gold, a 1/2 or 1.0 assay ton sample size is fire assayed using appropriate fluxes. The resultant dore bead is parted and then digested with aqua regia and then analyzed on a Perkin Elmer AA instrument.

Determinations for Au are completed by classical lead-collection fire assay on a 30g sample. Analysis is by ICP after digestion of the dore bead.

Appropriate standards and repeat sample (Quality Control components) accompany the samples on the data sheet.

## Analytical Procedure Assessment Report

## MULTI ELEMENT ICP ANALYSIS

Samples are catalogued and dried. Soil samples are screened to obtain a -80 mesh sample. Samples unable to produce adequate -80 mesh material are screened at a coarser fraction. These samples are flagged with the relevant mesh. Rock samples are 2 stage crushed to minus 10 mesh and pulverized on a ring mill pulverizer to minus 140 mesh, rolled and homogenized.

A 0.5 gram sample is digested with aqua regia which contains beryllium which acts as an internal standard. The sample is analyzed on a Jarrell Ash ICP unit.

Results are collated by computer and are printed along with accompanying quality control data (repeats and standards). Results are printed on a laser printer and are faxed and/or mailed to the client.

## BASE METAL ASSAYS (Ag, Cu, Pb, Zn)

Samples are catalogued and dried. Rock samples are 2 stage crushed followed by pulverizing a 250 gram subsample. The subsample is rolled and homogenized and bagged in a pre-numbered bag.

A suitable sample weight is digested with aqua regia. The sample is allowed to cool, bulked up to a suitable volume and analyzed by an atomic absorption instrument, to .01 % detection limit.

Appropriate certified reference materials accompany the samples through the process providing accurate quality control.

Result data is entered along with standards and repeat values and are faxed and/or mailed to the client.

K:Methods/methicp K:methods/methauas