

Ministry of Energy, Mines & Petroleum Resources  
Mining & Minerals Division  
BC Geological Survey

Assessment Report  
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geological, Prospecting

TOTAL COST: \$ 3,298.00

AUTHOR(S): Laurence Sookochoff, PEng

SIGNATURE(S): *Laurence Sookochoff*

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK: 2017

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5652710, June 13, 2017

PROPERTY NAME: Gold Queen

CLAIM NAME(S) (on which the work was done): 1052378

COMMODITIES SOUGHT: Copper, Gold, Molybdenum

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092G 046, 092F 051, 092F 052

MINING DIVISION: Alberni

NTS/BCGS: 092F.013

LATITUDE: 49 ° 11 ' 08 " LONGITUDE: 125 ° 25 ' 03 " (at centre of work)

OWNER(S):

1) John Bakus

2)

MAILING ADDRESS:

#3, 1572 Lorne Street East

Kamloops, BC V6C 1X8

OPERATOR(S) [who paid for the work]:

1) Doug Patterson

2)

MAILING ADDRESS:

B-3793 14h Avenue

Port Alberni BC V9Y 5B8

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Triassic, Vancouver Group, Karmutsen Formation, Basalt

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 15935, 18218, 18693, 21493, 25493, 31094

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping			
Photo interpretation			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil			
Silt			
Rock			
Other			
<b>DRILLING (total metres; number of holes, size)</b>			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying	20	1052378	\$ 2,000.00
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area)</b>	1:10000 500m X 20m	1052378	1,298.00
<b>PREPARATORY / PHYSICAL</b>			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
<b>TOTAL COST:</b>			<b>\$ 3,298.00</b>

**John Bakus**

*(Owner)*

**Doug Paterson**

*(Operator)*

**BC Geological Survey  
Assessment Report  
36971**

**GEOLOGICAL & GEOCHEMICAL**

**ASSESSMENT REPORT**

*(Event 5625710)*

*on a*

*Work done on*

**Tenure 1052378**

*of the five claim*

**Gold Queen Property**

*Alberni Mining Division*

*BCGS Map 092F.013*

*Work done from*

**June 9, 2017 to June 12, 2017**

*Centre of Work*

**5,450,085N, 325,063E**

*(10 NAD 83)*

*Author & Consultant*

**Laurence Sookochoff, PEng**

*Sookochoff Consultants Inc.*

*Submitted*

**February 16, 2018**

*Amendment Submitted*

**June 6, 2018**

## TABLE OF CONTENTS

	page
Summary -----	4.
Introduction -----	5.
Property Location and Description -----	5.
Accessibility, Climate, Local Resources, Infrastructure and Physiography --	7.
History: Property Area -----	8.
092F 044 – BEAR -----	8.
092F 045 - SHACK -----	8.
092L 158 – ISLAND COPPER -----	9.
History: Property -----	8.
092F 046 – OLYMPIC -----	8.
092F 051 - BLUEBIRD -----	8.
092F 052 - GOLD QUEEN -----	11.
Geology: Regional -----	11.
Geology: Property Area -----	11.
Mineralization: Property Area -----	14.
092F 044 – BEAR -----	14.
092F 045 - SHACK -----	14.
092L 158 – ISLAND COPPER -----	14.
Mineralization: Property -----	15.
092F 046 – OLYMPIC -----	15.
092F 051 - BLUEBIRD -----	15.
092F 052 - GOLD QUEEN -----	15.
2017 Exploration Program -----	16.
Soil and Silt Sampling -----	16.
Prospecting -----	16.
Interpretation and Conclusions -----	18.
Selected References -----	20.
Statement of Costs -----	21.
Author's Certificate -----	22.
Field Crew Qualifications -----	23.

*Table of Contents (cont'd)***ILLUSTRATIONS**

Figure 1. Location Map -----	5.
Figure 2. Property Location from Vancouver -----	6.
Figure 3. Property Location from Port Alberni -----	7.
Figure 4. Claim Map -----	8.
Figure 5. Regional Geology -----	10.
Figure 6. Geology, Claims, Index & Minfile -----	13.
Figure 7. Claim map showing UTM, roads, rivers, and work area -----	17.
Figure 8. Sample Locations -----	17.
Figure 9. Possible Bluebird Surface Level ~~~~~ in a Hydrothermal System -----	18.

**TABLES**

Table 1. Gold Queen Property Tenures -----	6.
Table II. Approximate UTM locations of cross-structures and Minfiles -----	19.
Table III. Selected Sample Assays -----	24.

**APPENDICES**

Appendix I Sample Types, Locations, and Notes
Appendix V Island Copper Photos

## SUMMARY

The four claim, 465 hectare, Gold Queen property ("Property") is located 126 kilometres west of Vancouver, 14 kilometres south of Port Alberni, and 252 kilometres southeast of the past productive Island Copper mine, on Vancouver Island. The Property is adjacent to Alberni Inlet, an Inlet extending from Port Alberni south-southwestward for 64 kilometres to the Pacific Ocean.

The geology of Vancouver Island is favourable to many types of mineral deposits with the more significant being: the Island Copper porphyry deposit from which 1.1 million tonnes of copper and 31,000 tonnes of gold were produced.

The Island Copper porphyry copper/molybdenum/gold deposit lies within volcanic rocks comprised of brecciated tuff, lapilli and tuff breccia which are cut by a quartz-feldspar porphyry/granodiorite intrusive dyke with volcanic and intrusive fragments capping the dyke and occurring along its margins. The Island Copper ore zones were controlled by the breccias associated intrusive.

The Gold Queen property is entirely underlain by Karmutsen volcanics which consist of andesitic to basaltic flows, tuffs and volcanoclastics. West-northwest trending fault/shear zones of Tertiary age cut the rocks. The Property includes three mineral showings one of which, the Bluebird, was explored rather extensively surficially and by diamond drilling based on narrow gold bearing quartz veins.

Surficial samples of the Elite veins returned up to 53.69 grams per tonne gold and 80.91 grams per tonne silver across 60 centimetres. Bulk sampling of surface exposures at the Elite 1 vein returned an average of 68.2 grams per tonne gold and diamond drilling returned up to 9.4 grams per tonne gold over 0.32 metre.

The 2017 prospecting and sampling program, completed over an area of unknown mineralization some 1,000 metres east of the Bluebird, was successful in locating narrow quartz veins, some with minimal mineralization, which could indicate a splay of quartz veins from a main epithermal vein system hosting significant gold values in a "Bonanza Gold Zone".

All geological revelations on and adjacent to the Gold Queen property indicate that the quartz veins are surficial to a concealed mineralized intrusive and potentially an Island Copper style mineral deposit which was exposed surficially by epithermal veins.

Exploration for a porphyry resource would best be initiated at the Minfile locations of the Olympic and Bluebird. Valuable information from the assessment reports on both the Olympic and the Bluebird should provide locations for additional exploration. An aggressive exploration program for an Island Copper type of porphyry resource should be initiated at the Bluebird and should be comprised of an IP survey and a 500 metre diamond-drill hole. If the diamond drill hole was not successful in reaching the intrusive, core logs and core analysis could provide the necessary information required to determine the location of a mineralized intrusive.

## INTRODUCTION

During June, 2017, prospecting and a soil/rock sampling exploration program was completed on Tenure 1052378 of the five claim Gold Queen Property (“Property”). The purpose of the exploration was to locate areas of potential gold-bearing mineral zones that may relate to a potentially economic mineral resource on the Property.

Information for this report was obtained from sources as cited under Selected References and from the procedures and results on the prospecting and sampling program given the author.

## PROPERTY LOCATION & DESCRIPTION

### Location

The Gold Queen Property is located in the Alberni Mining Division, central Vancouver Island, BC, Canada. The Property is located 104 miles due East of Nanaimo, 50 km east of Port Alberni and 25 km northwest of Ucuelet.

BC Provincial Highway 4 traverses the center of the Property, following the eastern bank of the Kennedy River from Port Alberni. The eastern half of the property is accessible directly from Highway 4, with a series of old overgrown roads which generally follow west-flowing creek valleys providing rough foot trails to the southeast portion of the Property.

There are also two new gravel roads in the northeast portion of the Property built to provide limited access to a run-of-river power infrastructure currently under construction along Canoe Creek. These new roads will be gated near the highway once construction is completed.

*Figure 1. Location Map  
(from MapPlace)*



### Description

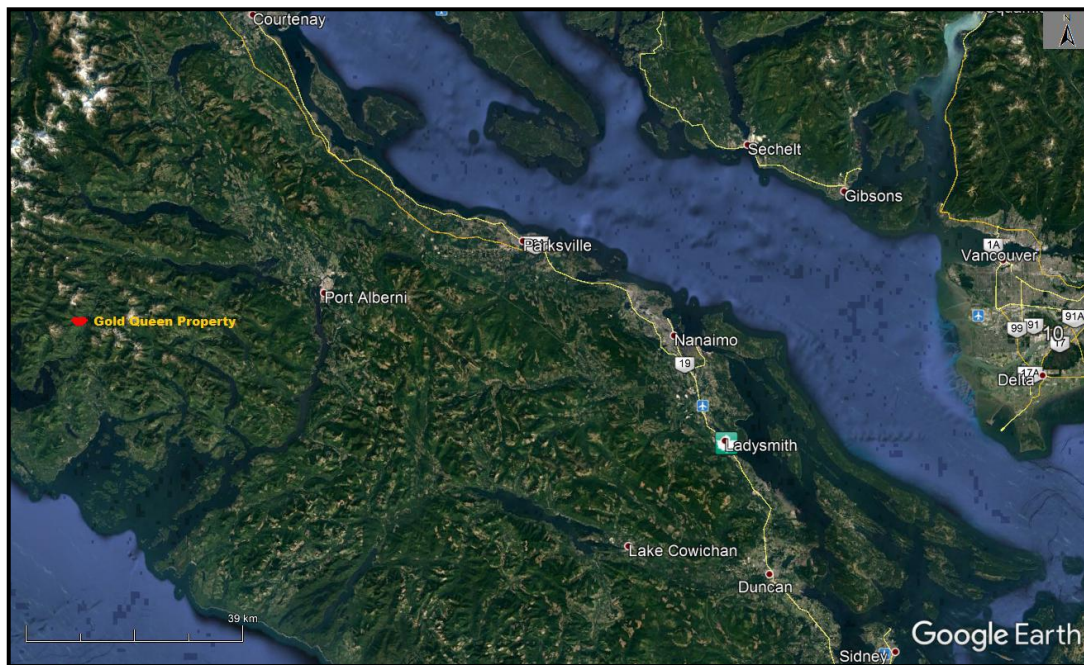
The Property is comprised of five contiguous mineral claims covering an area of 168.4297 hectares. Particulars are as follows:

Table I. Gold Queen Property Tenures

Tenure Number	Type	Claim Name	Good Until*	Area (ha)
<a href="#">528876</a>	Mineral	LAST 5	20221101	42.23
<a href="#">536731</a>	Mineral		20221101	42.233
<a href="#">1033027</a>	Mineral	KENNEDY ELITE 2	20221101	21.1156
<a href="#">1052378</a>	Mineral	RIVER	20221101	42.23
<a href="#">1052379</a>	Mineral	GOLD KING	20221101	21.1161

\*Upon the approval of the assessment work filing, Event 5625710.

Figure 2. Property Location from Vancouver  
(from MapPlace & Google Earth)

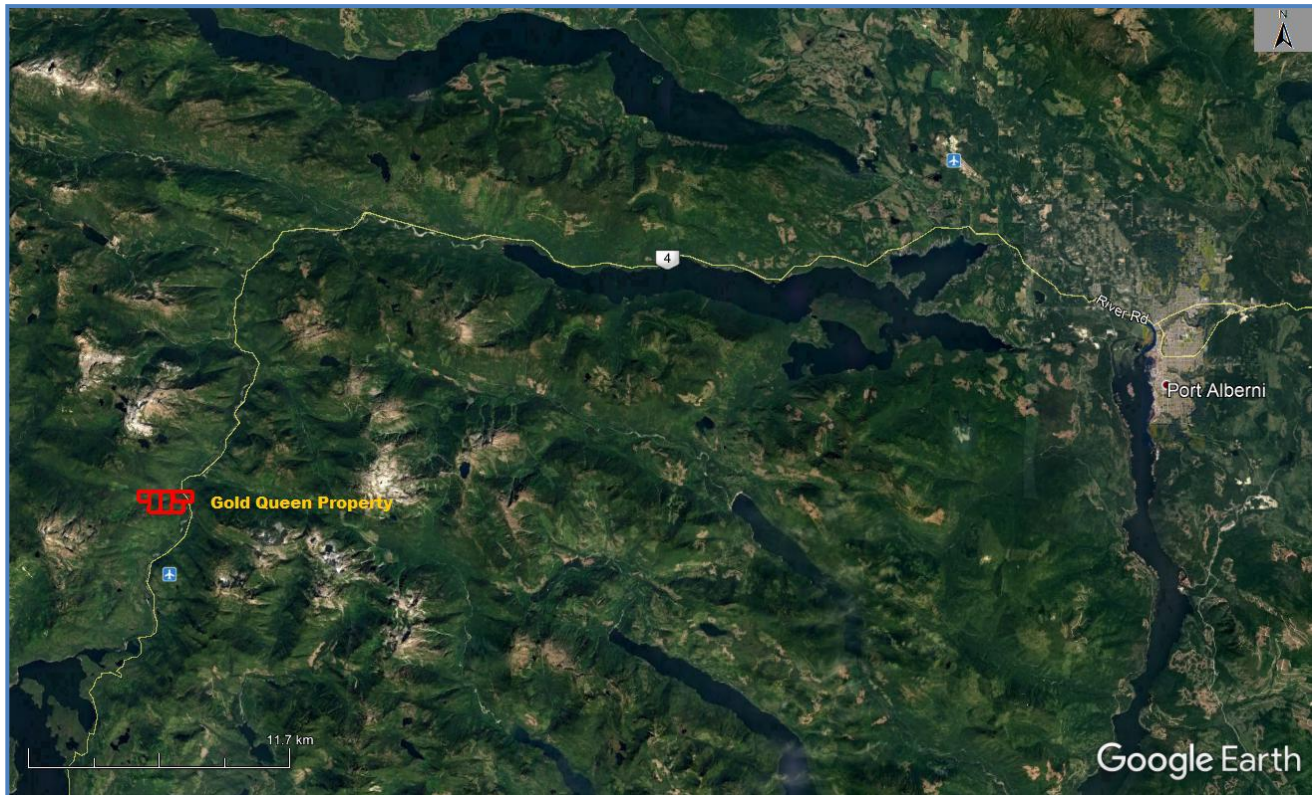


**ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY**

**Access**

From	To	Direction	Via	Kilometres
Vancouver	Nanaimo	West	Highway 1 & BC Ferry from Horseshoe Bay to Nanaimo	50
Nanaimo	Parksville	North	Island Highway	40
Parksville	Port Alberni	West	Highway 4/Alberni Hwy	46
Port Alberni	Property	West & South	Pacific Rim Highway 4	56



**Figure 3. Property Location from Port Alberni***(from MapPlace & Google Earth)****Accessibility, Climate, Local Resources, Infrastructure and Physiography (cont'd)*****Climate**

The climate is classified as West-Coast Marine with rainfall which may exceed 300 centimetres per year. Summers and winters are mild, with snow seldom remaining on the ground at tide-water for more than a day. The uppermost slopes may be snow covered for up to four months of the year.

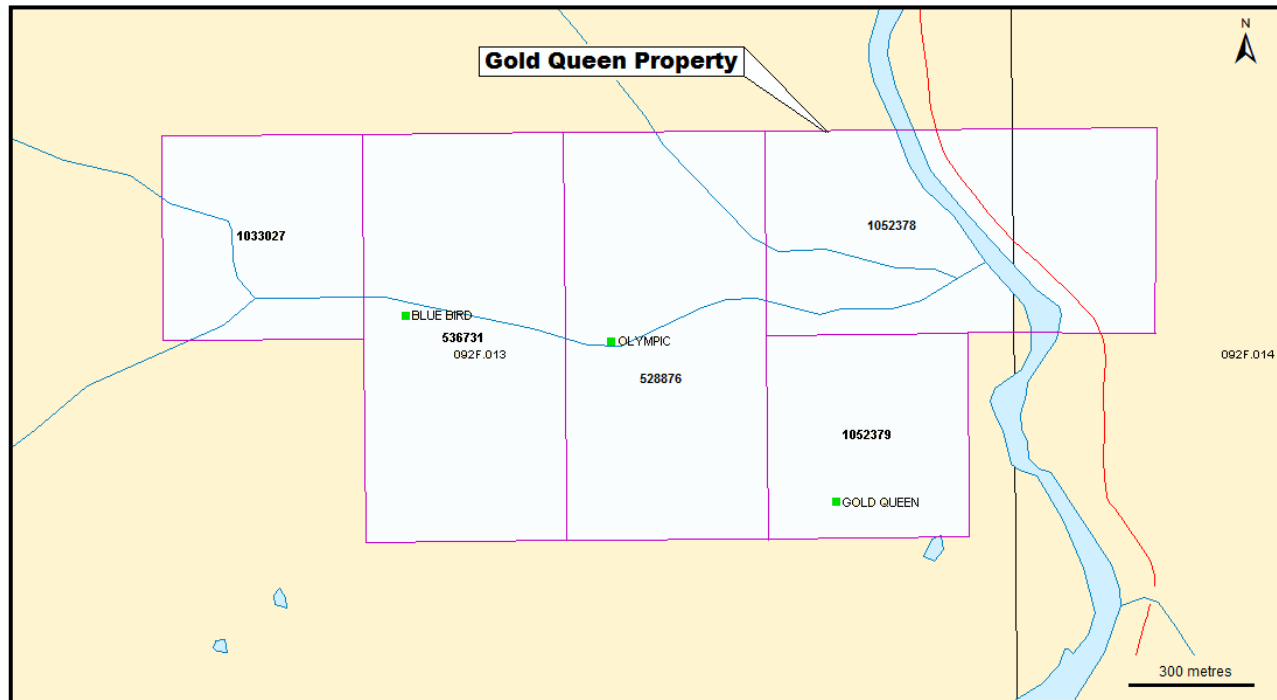
**Local Resources and Infrastructure**

Adequate resources and infrastructure are available at Port Alberni, Parksville, and/or Nanaimo for all stages of an exploration and development program on the Property.

**Physiography D**

The Property covers an area of gentle to moderate forested slopes with relief in the order of 421 metres. Elevations range from 27 metres within a river valley in the southeast to 448 metres at the southwestern-most corner of the Property.

**Figure 4. Claim Map**  
(Base map from MapPlace)



## HISTORY: PROPERTY AREA

**MINFILE** reports the history of two developed prospects peripheral to the Gold Queen property (*Figure 6*) as follows..

**BEAR** developed prospect (Cu+/-Ag quartz veins)  
MINFILE 092F 044  
Eight hundred metres south

*The claims were originally staked in the period around 1899 to 1902 and owned by T.O. MacKay. In 1938, the claims were sold to Kennedy Lake Gold Mines. In 1984, Rich Lode Gold Corp. completed a program of geochemical sampling and geological mapping on the area. In 2009 and 2010, G4G Resources Limited completed a program of prospecting and remote sensing, consisting of spectral analysis and synthetic aperture radar analyses, on the area as the G4G property.*

**SHACK** developed prospect (Cu+/-Ag quartz veins)  
MINFILE 092F 045  
Twelve hundred metres south

*The Iron Side claim was originally staked in the period around 1899 to 1902 and owned by T.O. MacKay. In 1938, the claims were sold to Kennedy Lake Gold Mines. In 1988, Golden Spinnaker Minerals completed a program of geological mapping, ground magnetic surveys, geochemical sampling and seventeen diamond drill holes, totalling 908 metres. In 2009 and 2010, G4G Resources Limited completed a program of prospecting and remote sensing, consisting of spectral analysis and synthetic aperture radar analyses, on the area as the G4G property.*

**History: Property Area (cont'd)****ISLAND COPPER** past producer (Porphyry Cu +/- Mo +/- Au)

MINFILE 092L 158

Two hundred fifty-two kilometres northwest

*During its operating life from 1971 to 1995 inclusive, the Mine produced about 1227 million kilograms of copper, 35,268 kilograms of gold, 294,106 kilograms of silver (probably 360,800 kilograms of silver), 32 million kilograms of molybdenum and 236 kilograms of rhenium from 367 million tonnes of ore.*

*BHP Minerals Canada Ltd. ceased mining operations in July 1995 and finished milling of surface stockpiles by the end of the year. The open pit was flooded in May 1996 and reclamation work continued for two years. A saw mill and lumber kiln, utilizing mine buildings and facilities, are being established at the mine site.*

*In 1998, BHP received the 1997 British Columbia Mine Reclamation Award.*

*In November 1999, GTN Copper Technology Ltd. of Sydney Australia (with an office in Englewood, California) announced their intention to develop an \$80 million copper processing plant employing approximately 70 persons at the former Island Copper Mine site near Port Hardy. The facility will import copper concentrate from mines in Western Canada, the U.S. and South America, with initial capacity to process 50,000 tons of copper per year, with potential to increase production to over 200,000 tons.*

**HISTORY: PROPERTY****MINFILE** reports the history of three showings within the Gold Queen property (*Figure 6*) as follows..**OLYMPIC** showing (Cu+/-Ag quartz veins)

MINFILE 092F 046

Within Tenure 528876

*The Olympic and Titanic veins were originally discovered in 1913. In 1986, K. Gourley staked the Blaster claim and completed a prospecting program and a geochemical silt survey the following year. From 1987 to 1988, Nationwide Gold Mines and Golden Spinnaker Minerals optioned the property and completed programs of trenching, VLF-EM surveys and diamond drilling. In 1988, bulk sampling and fourteen diamond drill holes, totalling 819 metres, were completed on the Elite 1 vein and nearby Rachel vein. In 1991, Kancana Ventures optioned the property. IA lone grab sample, from the Kristen II vein, returned values of 15.7 grams per tonne gold and 18.8 grams per tonne silver (Assessment Report 25493). From 1993 to 1995, the property was returned to and later prospected by K. Gourley. The area has been explored in conjunction with the nearby Blue Bird occurrence (MINFILE 092F 051).*

**BLUEBIRD** showing (Cu+/-Ag quartz veins)

MINFILE 092F 051

Within Tenure 536731

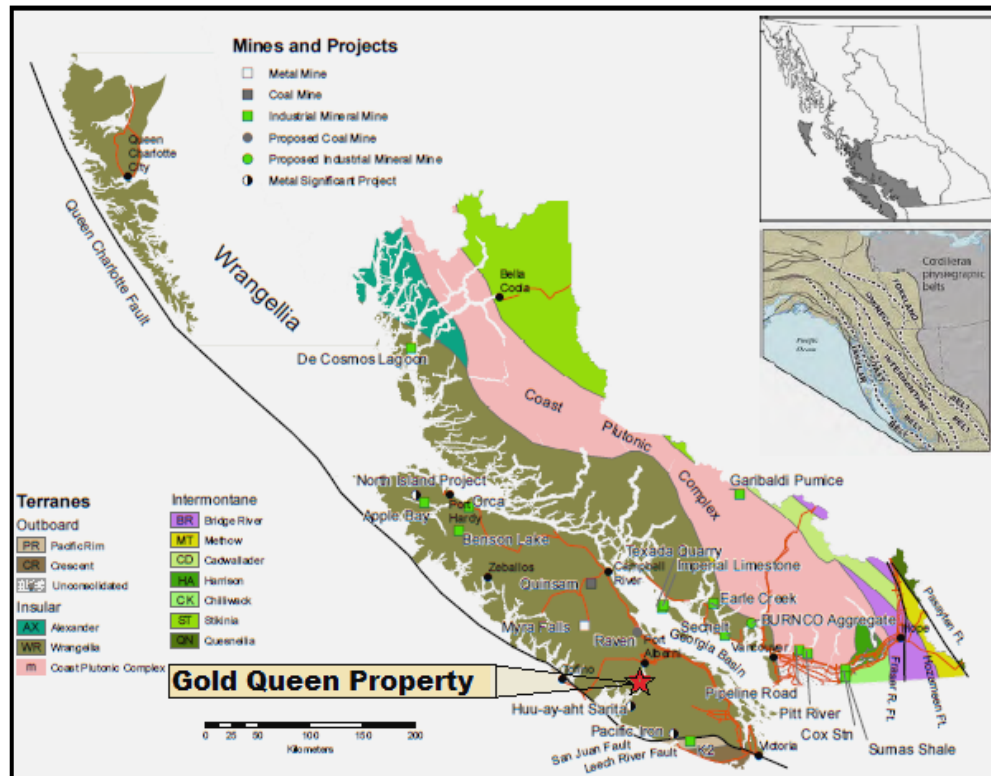
*In 1986, K. Gourley staked the Blaster claim and completed a prospecting program and a geochemical silt survey the following year. From 1987 to 1988, Nationwide Gold Mines and Golden Spinnaker Minerals optioned the property and completed programs of trenching, VLF-EM surveys and diamond drilling.*

**Bluebird showing (cont'd)**

**History: Property (cont'd)**

In 1988, bulk sampling and fourteen diamond drill holes, totalling 819 metres, were completed on the Elite 1 vein and nearby Rachel vein. In 1989, bulk sampling of surface exposures at the Elite 1 vein returned an average of 68.2 grams per tonne gold and diamond drilling returned up to 9.4 grams per tonne gold over 0.32 metre. In 1991, Kancana Ventures optioned the property. From 1993 to 1995, the property was returned to and In 1986, K. Gourley staked the Blaster claim and completed a prospecting program and a geochemical silt survey the following year. From 1987 to 1988, Nationwide Gold Mines and Golden Spinnaker Minerals optioned the property and completed programs of trenching, VLF-EM surveys and diamond drilling. In 1988, bulk sampling and fourteen diamond drill holes, totalling 819 metres, were completed on the Elite 1 vein and nearby Rachel vein. In 1989, bulk sampling of surface exposures at the Elite 1 vein returned an average of 68.2 grams per tonne gold and diamond drilling returned up to 9.4 grams per tonne gold over 0.32 metre. In 1991, Kancana Ventures optioned the property. From 1993 to 1995, the property was returned to and later prospected by K. Gourley. The area has been explored in conjunction with the nearby Olympic occurrence (MINFILE 092F 046). In 1995, sampling of the Elite veins assayed up to 11 grams per tonne gold, 28.5 grams per tonne silver and 37 parts per million tellurium over 0.10 metre (Assessment Report 25493).

Figure 5. **Regional Geology**  
(Base map from Northcote, 2015)



**History: Property (cont'd)**

**GOLD QUEEN** showing (Hydrothermal vein)  
MINFILE 092F 052  
Within Tenure 1052379

*In 1987 and 1988, Nationwide Gold Mines and Golden Spinnaker Minerals optioned the property and completed programs of trenching, VLF-EM surveys and geochemical sampling. In 2009 and 2010, G4G Resources Limited completed a program of prospecting and remote sensing, consisting of spectral analysis and synthetic aperture radar analyses, on the area as the G4G property.*

**GEOLOGY: REGIONAL**

The Gold Queen property is situated in the Insular Belt (Wrangellia) of the Canadian Cordillera. This terrain is one of five main northwest trending tectonic subdivisions and is dominated by Mesozoic volcanic, igneous and sedimentary rocks. The general geology of the Gold Queen property area has been mapped by Muller and Carson, 1969 and Muller, 1977. The area is underlain by Triassic, Karmutsen Formation basic to intermediate volcanic rocks which is intruded by a large northwest trending Jurassic, granodioritic stock of the Island Plutonic Suite.

**GEOLOGY: PROPERTY AREA**

**MINFILE** reports the geology of two developed prospects peripheral to the Gold Queen property (*Figure 6*) as follows..

**BEAR** developed prospect (Cu+/-Ag quartz veins)  
MINFILE 092F 044  
Eight hundred metres south

*The Bear shear zone is an east trending 30 metre wide hanging wall splay fault which forms the contact between andesite and quartz diorite. Within the shear zone the volcanics are intensely brecciated and locally silicified. Clay and chlorite form the alteration assemblage within the shear zone halo in quartz diorite. Chloritization and silicification mark the intrusive within the shear itself.*

**SHACK** developed prospect (Cu+/-Ag quartz veins)  
MINFILE 092F 045  
Twelve hundred metres south

*The Shack vein is emplaced along a north east trending fault which is probably a splay of the Mine Fault. The vein, hosted by andesite, averages 40 centimetres in width and extends for 160 metres along strike (053 degrees), dipping 60 to 67 degrees to the northwest. As indicated by drilling the vein contains 2 to 3 per cent pyrite, pyrrhotite, chalcopyrite and sphalerite. The wall- rocks are silicified, kaolinized and pyritized. In 1988, fourteen drill holes tested the vein and gave a weighted average of 11.4 grams per tonne gold and 77.5 grams per tonne silver across an estimated true width of 48 centimetres (Assessment Report 18693).*

**ISLAND COPPER** past producer (Porphyry Cu +/- Mo +/- Au)  
MINFILE 092L 158  
Two hundred fifty-two kilometres northwest

*The region is underlain by northwest trending belts of Upper Triassic volcanic rocks and sediments of the Vancouver Group (Karmutsen and Quatsino formations) and Lower Jurassic Bonanza Group volcanic rocks and sediments.*

**Island Copper past producer (cont'd)****Geology: Property Area (cont'd)**

*These rocks have been intruded by stocks of the Early-Middle Jurassic Island Plutonic Suite. The Island Copper deposit lies within moderately south dipping brecciated tuff, lapilli and tuff breccia of andesitic and basaltic composition, which comprise the lower part of the Bonanza Group pyroclastic sequence. These volcanic rocks are cut by a digitating quartz feldspar porphyry dyke trending 290 degrees and dipping 60 degrees north.*

*Breccias with volcanic and intrusive fragments cap the dyke and occur along its margins. Brecciation is less intense a short distance outward from the porphyry and within about 60 metres the dislocated breccia gives way to systems of intense fracturing (crackle breccia). On its northwest end the dyke is capped by pyrophyllite breccia (110 metres wide and traceable for 1100 metres along strike); to the southeast the dyke plunges under Bonanza rocks. Where it is least altered, the dyke exhibits a granodiorite composition. The host rocks have been subjected to contact thermal metamorphism and hydrothermal alteration. The metamorphic aureole can be subdivided into an inner zone 100 metres wide adjacent to the dyke and characterized by biotite and magnetite; an intermediate transitional chlorite zone (180 metres wide); and an outer epidote zone 350 metres wide. The ore is associated with the biotite zone and the inner part of the chlorite zone.*

*The hydrothermal alteration affects small volumes of rock (fractures, quartz-carbonate veinlets) and is closely related to fracturing and brecciation. This alteration resulted in assemblages termed the chlorite-sericite, sericite, pyrophyllite (pyrophyllite, dumortierite, kaolin) and "Yellow Dog" (rusty orange dolomite) types. In the volcanic rocks there is an inner pyrophyllite zone, a central sericite zone, and an outer chlorite-sericite zone. In the quartz- feldspar porphyry, there is an inner sericite zone and an outer chlorite-sericite zone. The pyrophyllite breccia has a mineral assemblage characteristic of the pyrophyllite-type alteration.*

*Marginal breccias have mineral assemblages of sericite and pyrophyllite types. "Yellow Dog" alteration is confined to "Yellow Dog" breccias, characterized by rusty brown fracture-fillings of ferroan dolomite.*

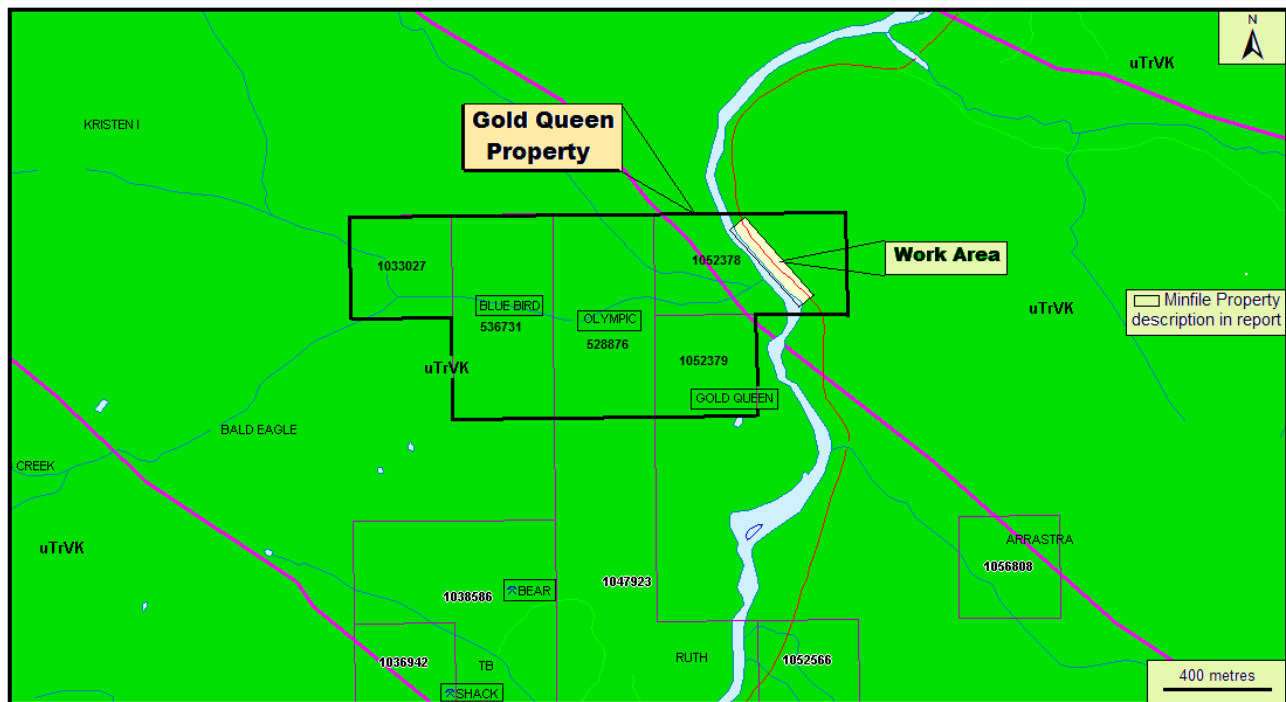
*The orebody is divided into the hanging wall and footwall ore zones. The hanging wall zone is a roughly tabular body 60 to 180 metre wide and approximately 1700 metres long, continuing to a depth of 300 metres below surface (Cargill, 1976). This zone strikes 290 degrees and dips 60 degrees north. The footwall ore zone is not as well defined as the hanging wall zone. A small amount of ore occurs within the dyke, however, most quartz feldspar porphyry is unmineralized.*

**GEOLOGY: PROPERTY**

As indicated by the geological map published by the BC Government supported MapPlace project, the Gold Queen property is entirely underlain by Karmutsen volcanics. The Karmutsen rocks consist of andesitic to basaltic flows, tuffs and volcanoclastics. West-northwest trending fault/shear zones of Tertiary age cut the rocks.

## Geology: Property (cont'd)

Figure 6. Property Geology, Claims, Index & Minfile  
(Base Map from MapPlace)



### GEOLOGY MAP LEGEND

#### Middle Triassic to Upper Triassic

##### uTrVK

Vancouver Group Karmutsen Fm  
basaltic volcanic rocks

**MINFILE** reports the geology of three showings within the Gold Queen property (Figure 6) as follows.

#### **OLYMPIC** showing (Cu+/-Ag quartz veins)

MINFILE 092F 046

Within Tenure 528876

Two showings occur along the Julius Creek shear zone. The Olympic showing, a 5 to 40 centimetre wide quartz vein striking 107 degrees and dipping 75 degrees north, contains pyrite and chalcopyrite. Wallrock alteration of the Karmutsen andesites consists of chlorite, limonite, sericite and silicification. An 8 centimetre chip sample assayed 3.35 grams per tonne gold and 49.37 grams per tonne silver (Assessment Report 15935).

The Baseline showing, located 200 metres east-southeast of the Olympic, is a quartz vein mineralized with pyrite and chalcopyrite. The vein is 10 to 50 centimetres wide and outcrops sporadically for 30 metres.

#### **BLUEBIRD** showing (Cu+/-Ag quartz veins)

MINFILE 092F 051

Within Tenure 536731

**Bluebird showing (cont'd)****Geology: Property (cont'd)**

Quartz veins, mineralized with chalcopyrite, pyrite and arsenopyrite, occur in a shear zone which is up to 12 metres wide. The shear zone lies within the volcanics.

The Elite vein is reported to occur at this location striking 060 degrees and dipping 60 degrees to the northeast. The 35 to 75 centimetre wide quartz-sulphide vein has been traced semi-continuously for 50 metres. The Elite vein appears to occur in a hanging wall splay of the Julius Creek shear zone. Massive to weakly brecciated andesitic volcanics host the vein. Pervasive chlorite with lesser silicification, limonite and bleaching form a halo of 40 centimetres adjacent to the vein. Some pyrite was noted within the halo.

**GOLD QUEEN** showing (Hydrothermal vein)

MINFILE 092F 052

Within Tenure 1052379

A 300-metre shear zone contains a 1 metre wide quartz vein with pyrite within the volcanics. In 1987, a value of 48 grams per tonne gold was reported (Assessment Report 15935).

**MINERALIZATION: PROPERTY AREA**

**MINFILE** reports the mineralization of two developed prospects peripheral to the Gold Queen property (Figure 6) as follows..

**BEAR** developed prospect (Cu+/-Ag quartz veins)

MINFILE 092F 044

Eight hundred metres south

Probable and possible reserves are estimated at 160,000 tonnes grading 17.4 grams per tonne gold. This includes reserves from the adjacent Shack vein (092F 045) and Elite vein (092F 051) occurrences (George Cross News Letter No.38, 1989).

**SHACK** developed prospect (Cu+/-Ag quartz veins)

MINFILE 092F 045

Twelve hundred metres south

A preliminary ore reserve estimate for the Shack vein has been calculated based on surface sampling and diamond drilling. The deposit contains from 37,920 to 42,015 metric tonnes of probable or possible ore grading from 19.20 to 24.03 grams per tonne gold (Assessment Report 18693). The vein has been tested to a depth of 122 metres where it remains open. It also remains open along strike at both ends.

**ISLAND COPPER** past producer (Porphyry Cu +/- Mo +/- Au)

MINFILE 092L 158

Two hundred fifty-two kilometres northwest

Although pyrite is the most abundant sulphide, chalcopyrite and molybdenite are the only sulphides recovered. Sphalerite and galena occur erratically in carbonate veinlets within and peripheral to the ore zone. Bornite has been observed in the ore zone in negligible quantities. Oxide minerals include magnetite, hematite and leucoxene.

Chalcopyrite occurs in dry fractures on slip surfaces and locally as disseminations. It also occurs in minor amounts in quartz veins with molybdenite, in carbonate veins with sphalerite, and in veins with pyrite. Gold and silver are recovered from the chalcopyrite concentrate.



**Mineralization: Property Area (cont'd)****Island Copper past producer (cont'd)**

Molybdenite occurs principally on slip surfaces and less abundantly in quartz veins and hairline fractures with chalcopyrite. Molybdenum concentrates contain between 1800 and 2400 parts per million rhenium (calculated to 100 per cent MoS<sub>2</sub>).

Based upon potassium-argon dating of the nearby Rupert Inlet stock and geological relationships between the stock, the porphyry dyke and the Island Copper orebody, mineralization probably occurred about 154 million years ago (*Geology, Exploration and Mining in British Columbia 1972, page 297*).

Reserves estimated by the company at January 1, 1995 were 23.4 million tonnes grading 0.33 per cent copper, 0.02 per cent molybdenum, 0.16 gram per tonne gold and 1.2 grams per tonnes silver.

**MINERALIZATION: PROPERTY**

**MINFILE** reports the mineralization of three showings within the Gold Queen property (*Figure 6*) as follows..

**OLYMPIC** showing (Cu+/-Ag quartz veins)

MINFILE 092F 046

Within Tenure 528876

Two showings occur along the Julius Creek shear zone. The Olympic showing, a 5 to 40 centimetre wide quartz vein striking 107 degrees and dipping 75 degrees north, contains pyrite and chalcopyrite. Wallrock alteration of the Karmutsen andesites consists of chlorite, limonite, sericite and silicification. An 8 centimetre chip sample assayed 3.35 grams per tonne gold and 49.37 grams per tonne silver (*Assessment Report 15935*).

The Baseline showing, located 200 metres east-southeast of the Olympic, is a quartz vein mineralized with pyrite and chalcopyrite. The vein is 10 to 50 centimetres wide and outcrops sporadically for 30 metres.

**BLUEBIRD** showing (Cu+/-Ag quartz veins)

MINFILE 092F 051

Within Tenure 536731

A grab sample of a mineralized vein of the Blue Bird showings assayed 2.06 grams per tonne gold, 34.3 grams per tonne silver and 0.7 per cent copper (*Minister of Mines Annual Report, 1923*).

The Elite vein is reported to host mineralization occurring primarily as pods, seams and fracture coatings, consists predominantly of pyrite and pyrrhotite. Arsenopyrite and sphalerite are also observed. Of 10 samples taken the best assay obtained was 53.69 grams per tonne gold and 80.91 grams per tonne silver across 60 centimetres. The lowest assay was 2.95 grams per tonne gold and 12.34 grams per tonne silver across 70 centimetres (*Henneberry, 1987*).

**GOLD QUEEN** showing (Hydrothermal vein)

MINFILE 092F 052

Within Tenure 1052379

In 1987, a value of 48 grams per tonne gold was reported (*Assessment Report 15935*).

## **2017 EXPLORATION PROGRAM**

### **Soil and Rock Sampling**

#### **Purpose**

The purpose of the program was to locate any anomalous mineral values of that may indicate a potential mineralized porphyry or related epithermal gold zone. Any indication of mineralized epithermal quartz veins may indicate a potentially economic Island Copper (Minfile 092L 158) porphyry copper/molybdenum/gold deposit at depth.

The sampling program consisted of the selection of 18 soil and rock samples from locations on Tenure 1052378 as shown on Figure 7. and by UTM location as indicated in the Table of Appendix I.

#### **Sampling Method**

UTM's and samples were taken from various locations throughout the area including Hard rock, float boulder, heavy mineral with sample UTM, and descriptions and additional points of interest were noted.

Four soil samples were taken periodically with rock samples adjacent to a road over a distance of approximately 500 metres. The samples were taken from undisturbed fresh brown forest soil at a depth of 15 centimetres beneath any organic matter. Each sample was placed in a manila envelope, labeled according to sample sequence, with the UTM location recorded.

Sixteen rock sample were taken from the prospected area as shown in Figure 6. The samples were placed in bag size grab samples (1-10 lbs). The UTM locations of the rock samples are presented in Appendix I.

#### **Prospecting**

Prospecting was performed over an area of approximately 500 metres by 200 metres between the river and the road as indicated on Figure 6.

In the process of prospecting the area, sample sites were marked with orange flagging. Multiple photos taken of samples, and areas. GPS coordinates were taken, and all samples recorded and mapped.

#### **Results**

A description of the rock samples by the field crew is included in the Table of Appendix I

Figure 7. Claim map showing UTM, roads, rivers, and work area

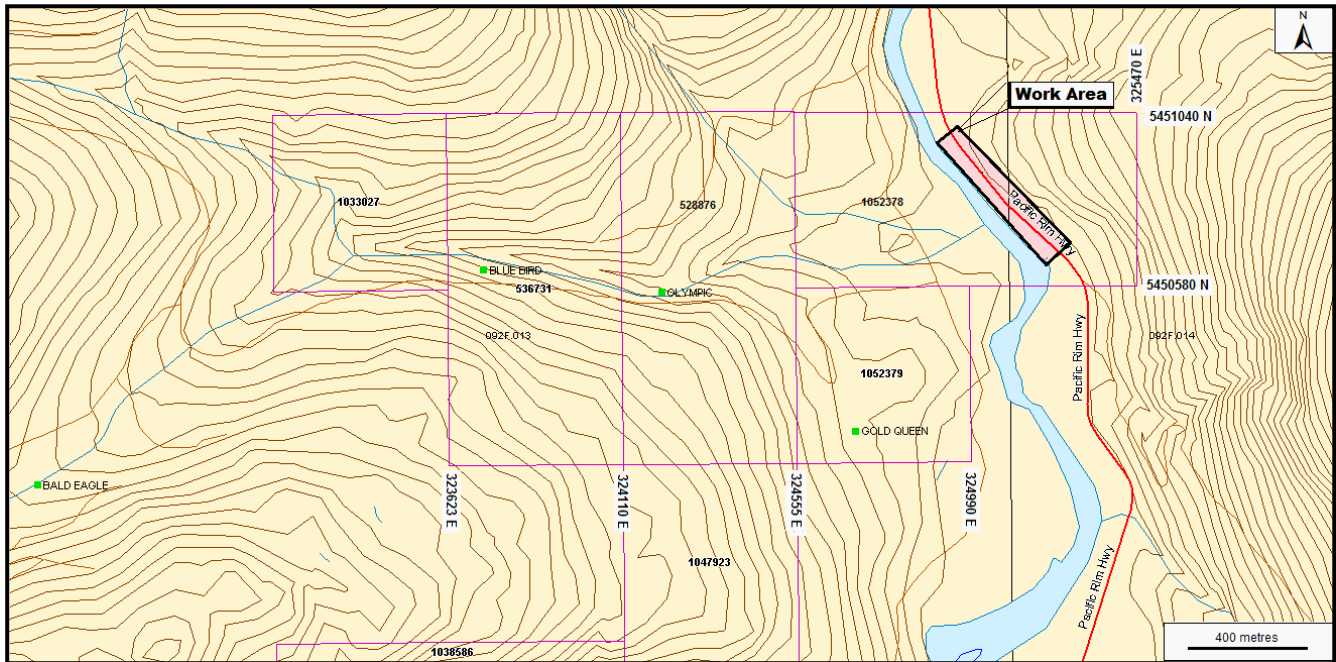
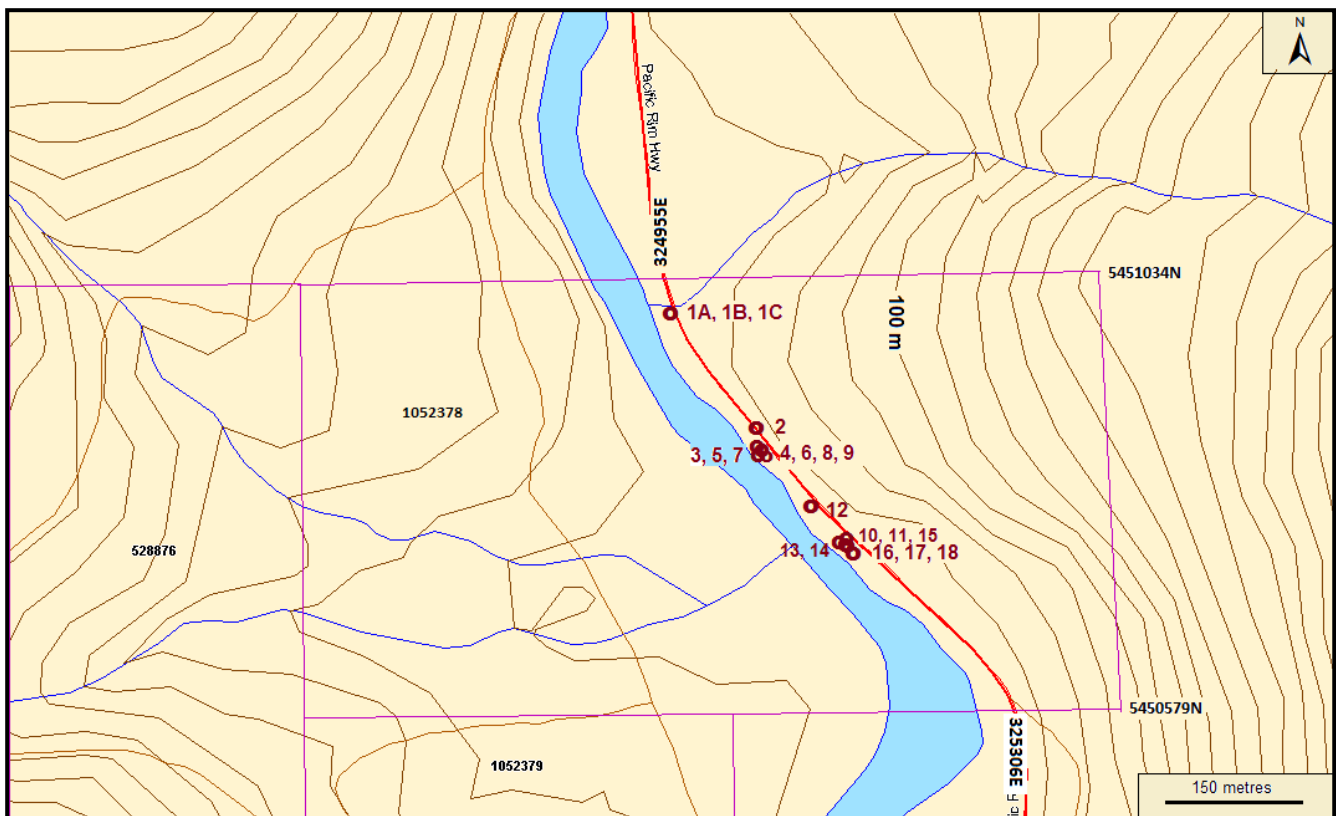
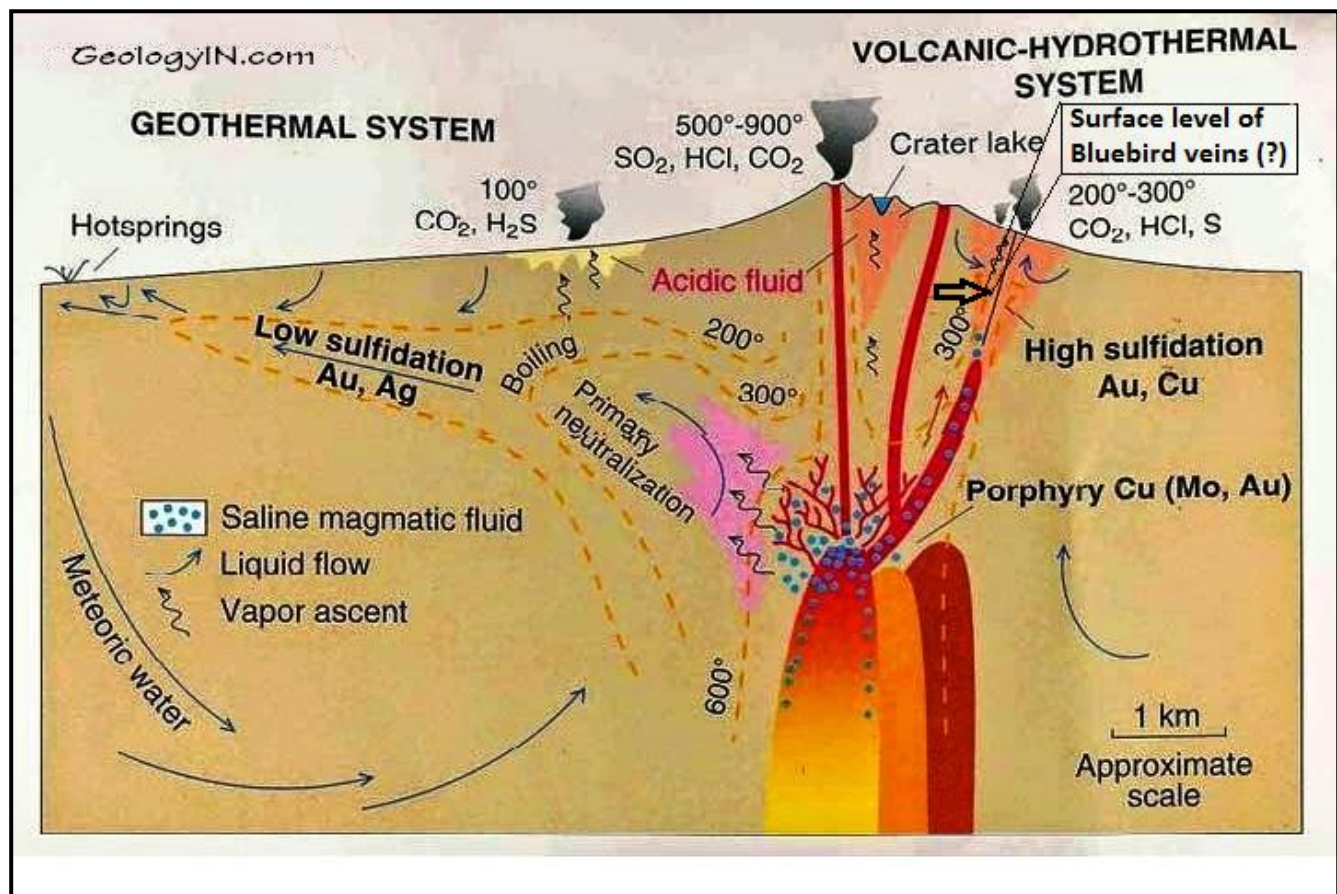


Figure 8. Sample Site Locations\*



\*see Appendix I for sample numbers with UTM coordinates

Figure 9. Possible Bluebird Quartz Vein Surface Level in a Hydrothermal System



## INTERPRETATION & CONCLUSIONS

The 2017 exploration program on Tenure 1052378 of the Gold Queen property was successful in that the rock samples displayed quartz veins up to three centimetres wide and quartz veins with some mineralization. The narrow quartz veins may indicate a splay of veins from an epithermal vein. As there is reported vein mineralization in two of the samples, the chemical analysis for elements in the vein would indicate the level of the epithermal system.

As the two Minfile showings on the Gold Queen property, namely the Olympic and the Bluebird, and the two Minfile developed prospects adjacent to the Gold Queen property, namely the Bear and the Shack, are typified as quartz veins, the quartz veins also have epithermal qualities as indicated by the Shack vein which is described as, "... locally brecciated quartz which is usually banded over a few cm near vein margins" (AR 18693).

And as the mineralized, epithermal and/or mesothermal veins, most likely originate from a concealed mineralized intrusive (Figure 8), a potential copper-gold porphyry resource is indicated.

Exploration for a porphyry resource would best be initiated at the Minfile location of the Olympic or Bluebird where previous exploration has identified quartz veins with values of 15.7 grams per tonne gold and 18.8 grams per tonne silver at the Olympic mineral showing and up to 53.69 grams per tonne gold and 80.91 grams per tonne silver at the Bluebird.

***Interpretation & Conclusions (cont'd)***

Valuable information from the assessment reports on both the Olympic and the Bluebird should provide locations for additional exploration. An aggressive exploration program for an Island Copper type of porphyry resource may be at the Bluebird and would be comprised of an IP survey and a 500 metre diamond-drill hole. If the diamond drill hole was not successful in reaching the intrusive, core logs and core analysis should provide the necessary information required to determine the location of a mineralized intrusive

The location and the angle of the diamond drill hole can also be adjusted to intersect a Bluebird quartz vein at depth so as to test for a possible " Bonanza Gold Zone" in an epithermal vein.

Respectfully submitted

Sookochoff Consultants Inc.



Laurence Sookochoff, PEng

**SELECTED REFERENCES**

**Gonzalez, R.A.** - Assessment Report on Geological and Geochemical Work on the Blaster Mineral Claim. July 1992. AR 21563.

**MtOnline** - MINFILE downloads.

092F 044 – BEAR

092F 045 - SHACK .

092L 158 – ISLAND COPPER

092F 046 – OLYMPIC .

092F 051 - BLUEBIRD

092F 052 - GOLD QUEEN

**Pawliuk, D.J.** - Diamond Drilling, Geology, Geophysical and Geochemical Surveys on the Blaster Mineral Claim for Nationwide Gold Mines Corporation and Golden Spinnaker Minerals Corporation. September 1988. AR 18218.

**Pawliuk, D.J.** - Drilling, Geology and Geophysical Surveys on the Great Bear Mineral Claim and the Captain Hook Mineral Claim for Golden Spinnaker Minerals Corporation and Nationwide Gold Mines Corporation. February 1989. AR 18693.

**Schroeter, T.G.,** ed., 1995, Porphyry deposits of the northwestern Cordillera of North America: Canadian Institute of Mining, Metallurgy and Petroleum Special Volume 46, 888 p.

**Sheehan, PA., Cherry, ME.** - Ore Deposit Models Volume II. Geoscience Canada. Reprint Series 6. Sutherland Brown, A., 1976, ed., Porphyry deposits of the Canadian Cordillera: The Canadian Institute of Mining and Metallurgy, Special Volume 15, the Charles S. Ney Volume, 510 p., 2 pl., scale 1:250,000,000

**Sinclair, W.D.,** 2007, Porphyry Deposits, in Goodfellow, W.D., ed., Mineral deposits of Canada.—A synthesis of major deposit-types, district metallogeny, the evolution of geological provinces, and exploration methods: Geological Association of Canada, Mineral Deposits Division, Special Publication no. 5, p. 223–243.

**Vincent, J.F.** - Consolidated Reports on the Kennedy Lake Claims for Rich Lode Gold Corporation. November 21, 1983. AR 11940

<http://www.empr.gov.bc.ca/Mining/Geoscience/MineralDepositProfiles/ListbyDepositGroup/Pages/IVeinBrecciaStockwork.aspx#i01>

**STATEMENT OF COSTS**

The field work was performed on Tenure 1052378 between June 9th and June 12th, 2017 to the value as follows:

**Prospecting and Sampling****Labour**

D. Paterson June 9-10, 2017

2 days @ \$350.00/day ----- \$ 700.00

T. Paterson June 9-10, 2017

2 days @ \$250.00/day ----- 500.00

D. Paterson June 10-12, 2017

1 day @ \$250.00/day ----- 250.00 \$ 1,450.00

**Travel/Transportation**

Port Alberni to Property return (2 vehicles and 2 trips)

Auto: 440 kilometres @ \$0.65 ----- \$ 507.00 (allow) 308.00

**Exploration Equipment**

GPS, radios, bear spray, chainsaw, etc ----- 140.00

**Food/Lodging**

4 man days @ \$ 100.00 ----- 400.00

**Report**

L. Sookochoff

2 days @ \$500.00/day ----- \$ 1,000.00

\$ 3,298.00

=====

## CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and principal of Sookochoff Consultants Inc. with an address at 120 125A-1030 Denman Street, Vancouver, BC V6G 2M6.

I, Laurence Sookochoff, further certify that:

- 1) I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
- 2) I have been practicing my profession for the past fifty-one years.
- 3) I am registered and in good standing with the Engineers and Geoscientists British Columbia.
- 4) The information for this report is based on information as itemized in the Selected Reference section of this report and from exploration work the author has performed on Vancouver Island.
- 5) I have no interest in the Gold Queen property as described herein.



Laurence Sookochoff, P. Eng.



## **FIELD CREW QUALIFICATIONS**

**Doug Paterson:** FMC 120793 30+ years field experience.

**Tom Paterson:** FMC 248861 15+ years field experience.

*Appendix I*

**Sample Types, Locations, and Notes**

*(Field Crew)*

*(UTM 10 NAD83)*

Kennedy	River			2017		
Work	Program					
Sample #	Type	UTM E	UTM N	LAT East	LAT North	Notes
Site 1 A	Soil	324957	5451016	49.186951	-125.402273	15 CM deep brown east side small creek
Site 1 B	Soil	324957	5451016	49.186951	-125.402273	15 CM deep brown west side small creek
Site 1 C	Float	324957	5451016	49.186951	-125.402273	Blue gray green, some quartz iron rust volcanic in small creek
Site 2	Situ	325032	5450908	49.185996	-125.401207	Fault bluish gray green volcanic with some quartz iron rust volcanics
Site 3	Situ	325030	5450864	49.1856	-125.401215	Fault, small quartz vein iron rust
Site 4	Situ	325038	5450866	49.18562	-125.401106	Fault small qtz vein 1 cm volcanic
Site 5	Situ	325035	5450862	49.185592	-125.401144	Fault small qtz vein 1 cm volcanic
Site 6	Situ	325038	5450865	49.185614	-125.401094	Quartz vein 3 cm rust in place fault 1 trench 3 ml x 15 cm W x 1 M D
Site 7	Situ	325031	5450863	49.185598	-125.401189	In place fault small qtz vein 1 cm Volcanic
Site 8	Situ	325043	5450860	49.185572	-125.401028	Fault small qtz vein 1 cm Volcanic rust
Site 9	Situ	325046	5450861	49.185581	-125.400986	Fault small qtz vein 1 cm Volcanic
Site 10	Situ	325117	5450778	49.184856	-125.399972	Some qtz and some mineralization
Site 11	Situ	325120	5450778	49.184854	-125.399932	By road, volcanic rock with quartz vein 2 cm some mineralization present
Site 12	Situ	325081	5450816	49.185185	-125.400493	Volcanic with small qtz pockets
Site 13	Situ	325112	5450779	49.184862	-125.400051	In place fault some quartz volcanic
Site 14	Situ	325115	5450776	49.184841	-125.400003	Fault some quartz present with rust volcanic
Site 15	Situ	325117	5450778	49.184856	-125.399981	Volcanic in place fault some quartz rusty
Site 16	Situ	325117	5450767	49.184758	-125.399972	Rusty quartz fault volcanic
Site 17	Soil	325117	5450767	49.184758	-125.399972	Soil east side of site 16
Site 18	Soil	325117	5450767	49.184758	-125.399972	Soil west side of site 16

*Appendix II*

**Photos of the Island Copper Mine**

