

# **VICTORY RESOURCES CORPORATION**

(Owner & Operator)

## **GEOLOGICAL ASSESSMENT REPORT**

*(Event 5476699)*

*on a*

### **STRUCTURAL ANALYSIS**

*Work done from September 29, 2013 to October 2, 2013*

*on*

**Tenure 966129**

*of the seven claim*

**Toni 966129 Claim Group**

*of the 88 claim 40,027 hectare*

**TONI PROPERTY**

**Nicola Mining Division**

**BCGS Map 092H.099/.100**

**Centre of Work**

**5,534,525N, 700,885E**

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**Sookchoff Consultants Inc.**

**BC Geological Survey  
Assessment Report  
34700**

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## SUMMARY

The seven claim Toni 966129 Claim Group of the Toni 966129 Claim Group, covering a 3,161 hectare area, is located 223 kilometres east-northeast of Vancouver, 47 kilometres southeast of Merritt, and within 15 kilometres of the past productive Brenda copper-molybdenum mine.

The Brenda copper-molybdenum deposit was hosted by the “Brenda Stock”, a composite quartz diorite/granodiorite body which forms part of the Early Jurassic Pennask batholith. East-west compressional forces reportedly intensely fractured the rocks of the Brenda stock during several stages of time and tapped a hydrothermal source which provided the mineralization that was repetitively introduced to the fracture system which increased with increasing compressional force. Primary chalcopyrite and molybdenite mineralization is confined almost entirely to veins hosted by the fractures. The grade of the orebody is a function of fracture (vein) density and of the thickness and mineralogy of the filling material.

East-west compression continued after ore deposition ceased and produced prominent east-northeast and northwest striking shear zones.

At the past productive Elk gold-silver property, 10 kilometres south of the Toni 966129 Claim Group, the mineral zones are distributed along the northerly trending Elk fault system which is evidenced topographically northerly for a minimum of 25 kilometres from, and not necessarily restricted to the limits of the formerly productive Elk property, to and beyond the SNOW mineral showing in the north. The mineral zones on the Elk property are proximal to the Elk fault and are controlled by structural intersections with east-northeasterly trending faults. Gold-silver mineralisation is hosted primarily by pyritic quartz veins and stringers in altered pyritic granitic and, less frequently, volcanic rocks.

The Toni 966129 Claim Group is predominantly underlain by the Early Jurassic Pennask batholith (LTrJgd) in a limited contact with the Nicola Group metamorphic rocks exposed adjacent to a capping of more recent Nicola Group sedimentary rocks. The northern limit of the Jurassic Okanagan Batholith, host to the Elk mineral zones, is within three kilometres southeast.

In the Structural Analysis of Tenure 966129 four structural intersections were delineated. These intersections could have developed localized zones, or pipes, of intense fracturing and brecciation to depth which could have tapped or provided subsequent mineral controlling features for any hydrothermal mineralizing solutions that may have been deposited in the progress to the surface. The surficial geological indicators may be revealed as minerals and/or alteration products that would be subject to interpretation for a potential underlying mineral resource.

For mineral deposit types such as skarn, vein, or porphyry mineralization mineral deposit types that may occur within the Toni 966129 Claim Group, reference is made to the eight Minfile properties as described with the name and location on Figure 4. The Minfile descriptions included in the report are copied from the BC Government Minfile records.

Excluding other variable geological conditions, the structures are essential in the localization of potentially economic porphyry and/or quartz vein hosted mineralization within the Pennask intrusive and/or the Nicola volcanics on the Property

## INTRODUCTION

During September & October 2013 a Structural Analysis was completed over Tenure 966129 of the seven claim Toni 966129 Claim Group (Property) of Victory's 88 claim 40,027 hectare Toni property. The purpose of the program was to delineate potential structures which may be integral in geological controls to potentially economic mineral zones that may occur on Tenure 966129 or other claims of the Toni property.

Information for this report was obtained from sources as cited under Selected References.

## TONI 966129 CLAIM GROUP DESCRIPTION AND LOCATION

### Description

The Property is comprised of seven contiguous claims covering an area of 3161.4907 hectares. Particulars are as follows:

Tenure Number	Type	Claim Name	Good Until*	Area (ha)
<a href="#">965949</a>	Mineral	TOE120	20140820	520.1682
<a href="#">965969</a>	Mineral	TOE121	20140820	520.0168
<a href="#">965989</a>	Mineral	TOE122	20140820	499.3795
<a href="#">966009</a>	Mineral	TOE123	20140820	332.8885
<a href="#">966029</a>	Mineral	TOE124	20140820	415.8311
<a href="#">966109</a>	Mineral	TOE126	20140820	498.8154
<a href="#">966129</a>	Mineral	TOE128	20140820	374.3912

\*Upon the approval of the assessment work filing, Event Number 5476699.

### Location

The Toni 966129 Claim Group is located within BCGS Map 092H.099/.100 of the Nicola Mining Division, 223 direct kilometres east-northeast of Vancouver, 47 direct kilometres southeast of Merritt, and 50 kilometres west of Kelowna. The centre of the work area is at 5,534,525N, 700,885E (10) (NAD 83).

The Property is located within 15 kilometres of the past productive Brenda Mine.

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

### Access

Access to the Toni 966129 Claim Group is southward from Merritt via Highway 5A/97C for 27 kilometres to the Aspen Grove junction thence eastward on Highway 5A/97 or the Coquihalla connector Highway, for 49 kilometres to within 200 metres the southeast corner of Tenure 9659899. There are numerous secondary forestry/logging roads for access on the seven claims of the Toni 966129 Claim Group.

*Accessibility, Climate, Local Resources, Infrastructure and Physiography (cont'd)***Climate**

The region is situated within the dry belt of British Columbia with rainfall between 25 and 30 cm per year. Temperatures during the summer months could reach a high of 35°C but average 25°C with winter temperatures reaching a low of -10°C and averaging 8°C. On the Toni 966129 Claim Group snow cover on the ground could be from December to April and would not hamper a year-round exploration program.

**Figure 1. Location Map**

(Map from MapPlace)

**Local Resources and Infrastructure**

Merritt, Kamloops, and/or Kelowna historic mining centres could be a source of experienced and reliable exploration and mining personnel and a supply for most mining related equipment. Kelowna is serviced daily by commercial airline. Vancouver, a port city on the southwest corner of, and the largest city in, the Province of British Columbia is six hours distant by road and less than one hour by air from Kelowna.

**Physiography**

The topography within the Toni 966129 Claim Group is of gentle to moderate sloped forested hills with localized logged areas. Relief is in the order of 205 metres ranging from an elevation of 1,440 metres in the northeast to 1,640 metres in the southeast.

**WATER & POWER**

Sufficient water for all phases of the exploration program could be available from the many lakes and creeks, which are located within the confines of the Toni 966129 Claim Group.

A 550 Kv power line passes through the northeastern portion of the Property.

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## HISTORY: TONI 966129 CLAIM GROUP AREA

The history on some of the more significant mineral MINFILE reported occurrences, prospects, and past producers peripheral to the Toni 966129 Claim Group are reported as follows. The distance from the Toni 966129 Claim Group is relative to Tenure 966129, which is the subject of the structural analysis.

### **NORTH BRENDA-CENTRAL** showing (Porphyry Cu +/- Mo +/- Au)

MINFILE 082ENW003

Fourteen kilometres east

*The North Brenda-Central showing is located approximately 5 kilometres north of the Brenda mine open pit (092HNE047), and 25 kilometres northwest of Peachland.*

*The showing was part of the extensive property holdings of Noranda. The showing was part of the extensive property holdings of Noranda Exploration Company Ltd in the 1960s. Numerous trenches, roads, and drillholes were left in this general area by Noranda; however, the results of this work was not filed as assessment work.*

### **MARN 16** showing (Porphyry Cu +/- Mo +/- Au)

MINFILE 092HNE043

Thirteen kilometres south

*This showing is centred 4.0 kilometres north of the north end of Brenda Lake and 2.5 kilometres east of Pennask Creek.*

*Kel-Glen Mines Ltd. completed geological, soil geochemical and geophysical surveys over the showing in 1966 and 1967, after staking the deposit in 1965. The company also drilled three diamond-drill holes totalling 376 metres and 4 percussion holes in 1966. The showing was restaked by Brenda Mines Ltd., operator of the nearby Brenda mine (092HNE047), in 1979.*

### **BRENDA** past producer (Porphyry Cu +/- Mo +/- Au)

MINFILE 092HNE047

Fifteen kilometres south-southeast

*The Brenda mine began production in early 1970 with measured geological (proven) reserves of 160,556,700 tonnes grading 0.183 per cent copper and 0.049 per cent molybdenum at a cutoff of 0.3 per cent copper equivalent [ $eCu = \% Cu + (3.45 \times \% Mo)$ ]. The mine officially closed June 8, 1990.*

### **SNOW** showing (Porphyry Cu +/- Mo +/- Au; Polymetallic veins Ag-Pb-Zn+/-Au)

MINFILE 092HNE270

Ten kilometres northwest

*The Pine showing is 500 metres south of Quilchena Creek and 4.8 kilometres north-northeast of the north end of Boot Lake.*

Figure 2. Claim Location  
(Base Map from MapPlace & Google Earth)

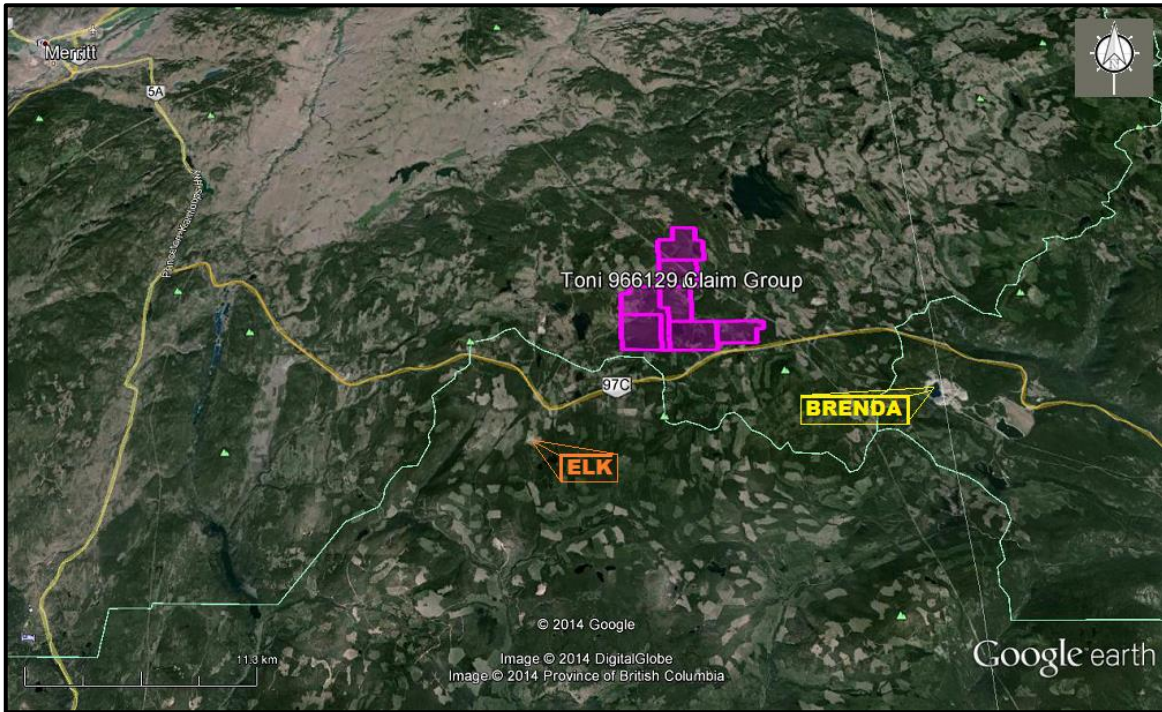
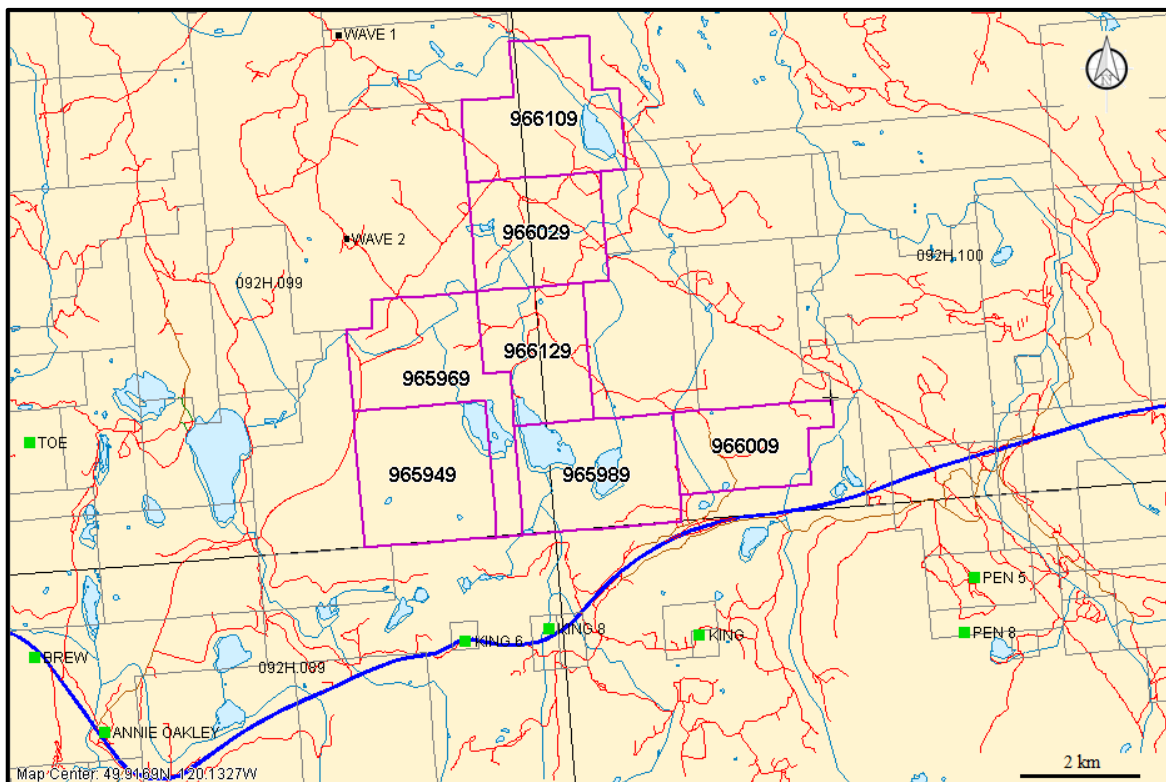


Figure 3. Claim Map  
(Map from MapPlace)





**History: Toni 966129 Claim Group Area (cont'd)****PEN 8** showing (Cu skarn: Au skarn)

MINFILE 092HNE301

Eight kilometres southeast

*The Pen 8 occurrence is 1.2 kilometres southeast of the summit of Pennask Mountain and 500 metres west-northwest of Hidden Lake.*

*The showing was prospected and sampled by Fairfield Minerals Ltd. in 1991.*

**WAVE 1** anomaly (Polymetallic veins Ag-Pb-Zn+/-Au)

MINFILE 092HNE311

Six kilometres north-northwest

*Between 1986 and 1995, Fairfield Minerals conducted exploration, including a program of wide-spaced grid soil sampling. The Wave 1 and 2 claims were staked to cover areas of mineralized quartz float and coincidental soil and stream anomalies. Recently, the area has been explored by Sookochoff Consultants as a part of the Toni property.*

**WAVE 2** anomaly (Polymetallic veins Ag-Pb-Zn+/-Au)

MINFILE 092HNE312

Three kilometres northwest

*Between 1986 and 1995, Fairfield Minerals conducted exploration, including a program of wide-spaced grid soil sampling. The Wave 1 and 2 claims were staked to cover areas of mineralized quartz float and coincidental soil and stream anomalies. Recently, the area has been explored by Sookochoff Consultants as a part of the Toni property.*

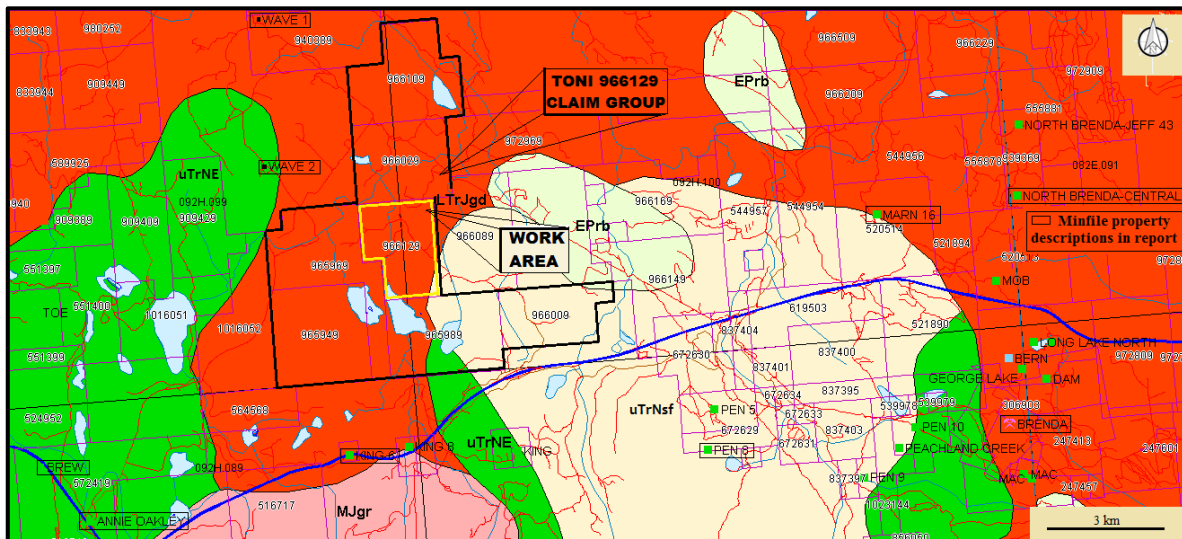
**GEOLOGY: REGIONAL**

The Aspen Grove geological district is located within the regional Quesnel Trough, a 30 to 60, km wide belt of Lower Mesozoic volcanic and related strata enclosed between older rocks and much invaded by batholiths and lesser intrusions (Campbell and Tipper, 1970). The southern part is the well-known Nicola belt which has been divided into western, central, and eastern belts on the basis of lithology and lithogeochemistry and by major fault systems. Variation from calc-alkaline to shoshinitic compositions from west to east has been interpreted to reflect eastward dipping subduction in the Nicola arc. The Toni 966129 Claim Group is situated within the eastern belt of the Nicola Group.

**GEOLOGY: TONI 966129 CLAIM GROUP AREA**

The geology on some of the more significant mineral MINFILE reported occurrences, prospects, and past producers peripheral to the Toni 966129 Claim Group (Figure 4) are reported as follows. The distance from the Toni 966129 Claim Group is relative to Tenure 966129, which is the subject of the structural analysis.

Figure 4. **Geology, Claim, Index & Minfile**  
(Base Map from MapPlace)



**GEOLOGY MAP LEGEND**

**Pleistocene to Recent**

**EPrb**

**Eocene-Penticton Group**

Andesitic volcanic rocks

**Upper Triassic**

**Eastern Volcanic Facies**

**uTrNE**

lower amphibolite/kyanite grade metamorphic rocks

**uTtNsf**

mudstone, siltstone, shale, fine clastic sedimentary rocks

**uTrNMI**

**Central Volcanic Facies**

**uTrNc**

andesitic volcanic rocks

**Late Triassic to Early Jurassic**

**LTrJgd**

unnamed granodiorite intrusive rocks

**Middle Jurassic**

**MJgr**

Unnamed granitic, alkalic feldspar Intrusive rocks

**Geology: Toni 966129 Claim Group Area (cont'd)**

**NORTH BRENDA-CENTRAL** showing (Porphyry Cu +/- Mo +/- Au)

MINFILE 082ENW003

Fourteen kilometres east

*The property is underlain by porphyritic quartz diorite of the Early Jurassic Pennask Batholith, locally known as the Brenda stock. Alteration of the quartz diorite is generally confined to fractures and to narrow alteration envelopes around those fractures. Four main alteration assemblages have been noted; quartz-hematite-pyrite, chlorite-epidote-potassium feldspar, biotite-chalcopryrite, and chlorite. The dominant trend of these fractures is northwest, in contrast to the northeast trend at the Brenda mine.*

**Geology: Toni 966129 Claim Group Area (cont'd)****MARN 16** showing (Porphyry Cu +/- Mo +/- Au)

MINFILE 092HNE043

Thirteen kilometres south

*The Marn 16 occurrence is situated in the vicinity of the contact between tuffaceous siltstone and bedded ash tuff of the Upper Triassic Whistle Creek Formation (Nicola Group) and coarse-grained, hornblende porphyritic granodiorite of the Early Jurassic Pennask batholith. The siltstone and tuff are contained in a large pendant of Nicola Group volcanics and sediments lying immediately southwest of the showing.*

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

MINFILE 092HNE047

Fifteen kilometres south-southeast

*The Pennask Mountain area is mainly underlain by a roof pendant comprising westerly younging, Upper Triassic sedimentary and volcanoclastic rocks of the Nicola Group. These are intruded and enclosed to the north, east and south by plutonic rocks of the Early Jurassic Pennask batholith and Middle Jurassic Osprey Lake batholith. Both the Nicola rocks and the Pennask batholith are unconformably overlain by Tertiary sediments and volcanics of the Princeton Group.*

*The Brenda copper-molybdenum deposit is within the "Brenda stock", a composite quartz diorite/granodiorite body which forms part of the Pennask batholith. Several ages and compositions of pre and post-ore dikes cut the stock. The deposit is approximately 390 metres from the contact with Nicola Group rocks to the west.*

*Nicola Group tuffs, volcanic breccias and flows adjacent to the Brenda stock have been altered to "schistose hornfels". This hornfels, which is as wide as 450 metres, is characterized by the development of bands and aligned lenses of felted brown to black biotite. Schistosity generally strikes roughly parallel to the intrusive contact and dips west at 30 to 70 degrees. The schistose hornfels grades westerly into recognizable west-dipping volcanic rocks which in turn are overlain by greywacke, argillite and shales.*

*The Brenda stock is a composite, zoned quartz diorite to granodiorite body which can be divided into two units. Unit 1 is of quartz diorite composition and contains abundant mafic minerals (hornblende > biotite) and angular quartz grains, whereas unit 2 is porphyritic granodiorite and contains fewer mafic minerals (biotite > hornblende), well-defined biotite phenocrysts and subhedral quartz grains. The contact between units 1 and 2 is generally gradational, but locally sharp. At sharp contacts, unit 2 is chilled against unit 1.*

*Dikes of several ages and compositions cut the Brenda stock. At least four types, aplite-pegmatite, andesite, trachyte porphyry and basalt, have been identified in the Brenda orebody.*

*Similar dikes, as well as felsite, dacite and quartz diorite have been mapped beyond the limits of economic mineralization. The aplite-pegmatite dikes are cut by all other dikes and by all mineralized fractures. The andesite dikes have been altered and mineralized during ore formation. Two types of quartz diorite dikes are found and both are cut by quartz-sulphide veins. Dacite porphyry and felsite dikes are also cut by quartz-sulphide veins.*

*A trachyte porphyry dike up to 4.5 metres wide and 300 metres in strike length is exposed in the Brenda pit.*

**Geology: Toni 966129 Claim Group Area (cont'd)****Brenda past producer (cont'd)**

*A weakly mineralized vein was observed in the dike which suggested an intermineral age for the dike. Further evidence has clearly shown that the dikes cut all stages of mineralization, except some of the latest quartz veins (Canadian Institute of Mining and Metallurgy Special Volume 15). Several post-mineral hornblende lamprophyre dikes also occur within the Brenda orebody and are probably genetically related to the trachyte porphyry dikes.*

*Irregular, branching basalt dikes, probably related to Tertiary volcanism, have been intruded along pre-existing fault zones. They cut all phases of mineralization and alteration.*

*Initial potassium-argon dating of two samples from the Brenda mine area resulted in different ages for hornblende (176 Ma) and biotite (148 Ma). Interpretation of these results suggests that the Brenda stock crystallized about 176 million years ago. Biotite samples from the pit area have been dated at about 146 Ma, which probably represents the age of mineralization (Canadian Institute of Mining and Metallurgy Special Volume 15).*

*Faults in the Brenda pit are expressed as fracture zones in which the rock is intensely altered to clay minerals, sericite, epidote and chlorite. These fracture zones range in width from a few centimetres to 9 metres. Most strike 070 degrees and dip steeply south. Northwest-striking faults exhibit left-lateral movement. The faults transect all mineralization, except some calcite veins. Sulphides, especially molybdenite, have been smeared along fault planes. Shear zones are wider and more numerous in the north half of the pit, where they control bench limits.*

**SNOW** showing (Porphyry Cu +/- Mo +/- Au; Polymetallic veins Ag-Pb-Zn+/-Au)

MINFILE 092HNE270

Ten kilometres northwest

*A drillhole intersected minor copper mineralization in weakly to moderately chloritized granite of the Early Jurassic Pennask batholith.*

**KING 6** showing (Intrusion-related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn+/-)

MINFILE 092HNE297

Five kilometres south

*A drusy quartz vein, 10 centimetres wide, cuts coarse-grained, feldspar megacrystic granite of the Middle Jurassic Osprey Lake batholith.*

**PEN 8** showing (Cu skarn: Au skarn)

MINFILE 092HNE301

Eight kilometres southeast

*The showing occurs in tuffaceous siltstone and argillite of the Upper Triassic Whistle Creek Formation (Nicola Group), at the south end of a small north-trending stock of granodiorite, 1.8 kilometres long. This stock may be related to the Early Jurassic Pennask batholith, which surrounds the Nicola Group volcanics and sediments comprising this roof pendant. The siltstone and argillite are hornfelsed and intercalated with calcsilicate and quartz-garnet bands*

**Geology: Toni 966129 Claim Group Area (cont'd)****WAVE 1** anomaly (Polymetallic veins Ag-Pb-Zn+/-Au)

MINFILE 092HNE311

Six kilometres north-northwest

*The area is underlain by granitic rocks of the Jurassic Pennask batholith and basaltic volcanics of the Triassic Nicola Group.*

**WAVE 2** anomaly (Polymetallic veins Ag-Pb-Zn+/-Au)

MINFILE 092HNE312

Three kilometres northwest

*The area is underlain by granitic rocks of the Jurassic Pennask batholith and basaltic volcanics of the Triassic Nicola Group.*

**GEOLOGY: TONI 966129 CLAIM GROUP**

The Toni 966129 Claim Group is predominantly underlain by the Early Jurassic Pennask batholith (LTrJgd) in a limited contact with the Nicola Group metamorphic rocks exposed adjacent to a capping of more recent Nicola Group sedimentary rocks. The northern limit of the Jurassic Okanagan Batholith, host to the Elk mineral zones, is within three kilometres southeast.

**MINERALIZATION: TONI 966129 CLAIM GROUP AREA**

The mineralization on some of the more significant mineral MINFILE reported showings, prospects, and past producers peripheral to the Toni 966129 Claim Group are reported as follows. The distance from the Toni 966129 Claim Group is relative to Tenure 966129, which are the subject of the structural analysis.

**NORTH BRENDA-CENTRAL** showing (Porphyry Cu +/- Mo +/- Au)

MINFILE 082ENW003

Fourteen kilometres east

*Chalcopyrite mineralization is present as very thin fracture fillings with biotite. Cross-cutting relationships indicate that the chalcopyrite fracture fillings are the oldest. Malachite is found on weathered surfaces.*

**MARN 16** showing (Porphyry Cu +/- Mo +/- Au)

MINFILE 092HNE043

Thirteen kilometres south

*The granodiorite is cut by fractures and quartz +/- orthoclase veins 1 to 2 centimetres wide, containing blebs and plates of molybdenite and blebs of chalcopyrite and pyrite. Minor chalcopyrite occurs along chlorite +/- pyrite and epidote +/- pyrite fractures and stringers. The mineralized veins and fractures are widely spaced and have various attitudes. A bulk sample of mineralized granodiorite assayed 0.088 per cent molybdenum and 0.045 per cent copper (Assessment Report 875, part 2, page 9).*

*This mineralization is exposed over a distance of 45 metres along the southeast-striking granodiorite-siltstone contact, usually within tens of metres of the contact. Traces of chalcopyrite are also found within the siltstone. Diamond drilling intersected traces of chalcopyrite and molybdenite in three holes spaced over a distance of 150 metres.*

**Mineralization: Toni 966129 Claim Group Area (cont'd)****BRENDA** past producer (Porphyry Cu +/- Mo +/- Au)

MINFILE 092HNE047

Fifteen kilometres south-southeast

*The Brenda orebody is part of a belt of copper-molybdenum mineralization that extends north-northeast from the Nicola Group-Brenda stock contact. Mineralization of economic grade (0.3 per cent copper equivalent) is confined to a somewhat irregular zone approximately 720 metres long and 360 metres wide. Ore-grade mineralization extends more than 300 metres below the original surface. Lateral boundaries of ore-grade mineralization are gradational and appear to be nearly vertical.*

*Primary mineralization is confined almost entirely to veins, except in altered dike rocks and in local areas of intense hydrothermal alteration which may contain minor disseminations. The grade of the orebody is a function of fracture (vein) density and of the thickness and mineralogy of the filling material. The average total sulphide content within the orebody is 1 per cent or less. Chalcopyrite and molybdenite, the principal sulphides, generally are accompanied by minor, but variable, quantities of pyrite and magnetite. Bornite, specular hematite, sphalerite and galena are rare constituents of the ore. Johnson (1973), in a study of 17 samples from the deposit, reported minor pyrrhotite, mackinawite, carrollite, cubanite, ilmenite, rutile and native gold (?), as well as several secondary sulphides (Canadian Institute of Mining and Metallurgy Special Volume 15).*

*Pyrite is most abundant in altered andesite dikes and in quartz-molybdenite veins. The ratio of pyrite to chalcopyrite in the orebody is about 1:10, with the chalcopyrite content diminishing beyond the ore boundaries.*

*Because mineralization is confined almost entirely to veins in relatively fresh homogeneous rock, the veins are divided into separate stages, based on crosscutting relations and their mineralogy and alteration effects on the hostrock. The vein density within the orebody is not uniform.*

*Ranges are recorded from less than 9 per metre near the periphery of the orebody to 63 per metre and occasionally 90 per metre near the centre of the orebody. Some veins have very sharp contacts with wall rocks, but most contacts are irregular in detail where gangue and sulphide minerals replace the wallrock.*

*A vein may show features characteristic of fracture-filling in one part and of replacement in another. Mineralized solutions were introduced into fractures and, during development of the resultant veins, minor replacement of the wallrock ensued.*

*The chronological stages of mineralization are as follows: (1) biotite-chalcopyrite (oldest); (2) quartz-potassium feldspar-sulphide; (3) quartz-molybdenite-pyrite; (4) epidote-sulphide-magnetite; and (5) biotite, calcite and quartz. Stages 1 through 4 are all genetically related to a single mineralizing episode, which was responsible for the orebody. Stage 5 represents a later, probably unrelated, event(s) (Canadian Institute of Mining and Metallurgy Special Volume 15). Stage 2 veins form the bulk of the mineralization in the deposit, and are the most important source of ore.*

*Hydrothermal alteration at the Brenda deposit generally is confined to narrow envelopes bordering veins. These alteration envelopes commonly grade outward into unaltered or weakly propylitic-altered rock.*

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**Mineralization: Toni 966129 Claim Group Area (cont'd)****Brenda past producer (cont'd)**

Where veins are closely spaced, alteration envelopes on adjacent veins may coalesce to produce local areas of pervasive alteration. For the most part, hydrothermal alteration at the Brenda deposit is exceptionally weak for a porphyry copper system.

Four types of alteration are recognized in the Brenda deposit, three of which are related to the mineralizing process. Two of these are potassic (potassium feldspar) and biotite, and the other is propylitic. Later argillic alteration has been superimposed on the system along post-mineral faults.

Potassium feldspar and biotite alteration generally are separated in space, but locally occur together. Both types of alteration accompanied sulphide deposition. Potassium feldspar replaces plagioclase adjacent to most stage 2 and, to a lesser extent, stage 3 veins. These irregular envelopes range in width from a centimetre or less up to a metre, with an average of about 2 centimetres. Potassium feldspar also occurs as a minor constituent of stage 1 veins.

Hydrothermal biotite replaces magmatic mafic minerals (hornblende, biotite) and, more rarely, plagioclase in hostrock adjacent to stage 2 and especially stage 3 veins. These envelopes of hydrothermal biotite range in width from less than 1 millimetre to several centimetres.

Weak to intense propylitic alteration, which is characterized by the development of chlorite and epidote, as well as less obvious microscopic sericite and carbonate, is sporadically distributed throughout the Brenda stock. Large areas within the orebody have not been propylitized and in these areas, veins with potassic alteration envelopes clearly cut across propylitized quartz diorite, indicating an early hydrothermal or even a pre-ore origin for the propylitization (Canadian Institute of Mining and Metallurgy Special Volume 15). A second period of propylitization accompanied the development of stage 4 veins and is reflected as envelopes of epidote and chlorite.

Locally intense argillic alteration is confined to post-mineral fault zones where the hostrock has been highly shattered. Kaolinite, sericite and epidote have almost completely replaced the host rocks.

Surface weathering, which is expressed predominantly by the development of limonite, extends as a highly irregular blanket over the mineralized zone for depths ranging from a few metres to greater than 30 metres. In this weathered area, limonite stains all fractures. Fault zones have been especially susceptible to surface weathering, and the argillic alteration of these zones may be primarily the result of groundwater action. Secondary minerals developed during weathering, all highly subordinate in quantity to limonite, include malachite, azurite, hematite, ferrimolybdate, powellite and cupriferous manganese oxides. Cuprite, covellite, chalcopyrite, native copper, tenorite and ilsemanite are rare constituents.

Copper-molybdenum mineralization in the Brenda deposit was developed during several sequential stages, all of which constitute one mineralizing episode.

Each stage occupies unique sets of fractures, which are filled with specific combinations of metallic and gangue minerals. Although the attitudes of veins in each stage are unique in detail, most stages include conjugate steeply dipping sets of northeast and northwest striking veins. If these veins occupy shear fractures, it is probable that they were formed by generally east-west compressive forces. Examination of the structure in the Nicola Group rocks to the west reveals that north-northwest and north trending fold axes also indicate an east-west compression.

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**Mineralization: Toni 966129 Claim Group Area (cont'd)****Brenda** past producer (cont'd)

*It is suggested that intermittent east-west compressional forces intensely fractured the rocks of the Brenda stock during several stages of time and tapped a hydrothermal source, either a later phase of the Brenda stock or a separate intrusive system.*

*As each stage of fractures developed, hydrothermal fluids introduced vein material which healed the fractures. Renewed build-up of compressional forces again fractured the rocks, which were again healed. Repetition of this sequence can explain all stages of mineralization within the Brenda deposit. East-west compression continued after ore deposition ceased and produced prominent east-northeast and northwest striking shear zones (Canadian Institute of Mining and Metallurgy Special Volume 15).*

**SNOW** showing (Porphyry Cu +/- Mo +/- Au; Polymetallic veins Ag-Pb-Zn+/-Au)

MINFILE 092HNE270

Ten kilometres northwest

*A sample of drill core from 28.0 metres depth contained fine-grained magnetite accompanied by fine-grained chalcocite or bornite along the margins of a zeolite vein. Copper mineralization also occurs along fractures and as disseminations in the granite. Two assays of a grab sample taken in the vicinity of the drillhole yielded less than 0.3 gram per tonne gold, 3.1 grams per tonne silver and 0.54 per cent copper, and 0.45 gram per tonne gold, 3.1 grams per tonne silver and 0.30 per cent copper, respectively (Assessment Report 3415, assay certificates).*

**KING 6** showing (Intrusion-related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn+/-)

MINFILE 092HNE297

Five kilometres south

*The vein is mineralized with scattered blebs of chalcopyrite. A selected sample analysed 0.41 gram per tonne gold and 7.8 grams per tonne silver (Assessment Report 21922, page 9, Table 2, sample Q1b-R3).*

**PEN 8** showing (Cu skarn: Au skarn)

MINFILE 092HNE301

Eight kilometres southeast

*The siltstone and argillite are hornfelsed and intercalated with calcsilicate and quartz-garnet bands. The bands are mineralized with disseminated pyrrhotite, arsenopyrite, chalcopyrite and sphalerite (?). Selected grab samples of outcrop and talus analysed 0.0075 gram per tonne gold and 1.0 gram per tonne silver (Assessment Report 22304, page 18, Table 2, sample PEN91-R19).*

**WAVE 1** anomaly (Polymetallic veins Ag-Pb-Zn+/-Au)

MINFILE 092HNE311

Six kilometres north-northwest

*Locally, mineralized quartz vein float was found and contain disseminated pyrite and limonite with occasional specks of chalcopyrite, galena or sphalerite. In 1991, samples of mineralized vein float, up to 0.20 metre in diameter, returned up to 8230 parts per billion gold, 249.3 parts per million silver, 844 parts per million copper and 4091 parts per million lead (Assessment Report 22864).*



**Mineralization: Toni 966129 Claim Group Area (cont'd)**

**WAVE 2** anomaly (Polymetallic veins Ag-Pb-Zn+/-Au)

MINFILE 092HNE312

Three kilometres northwest

*Locally, mineralized quartz vein float was found and contain disseminated pyrite and limonite with occasional specks of chalcopyrite, galena or sphalerite. In 1991, samples of mineralized vein float, up to 0.20 metres in diameter, returned up to 25.7 parts per million silver, 1732 parts per million lead and 2107 parts per million zinc (Assessment Report 22864).*

**STRUCTURAL ANALYSIS**

The structural analysis was performed on a DEM image hillshade map of Tenure 966129 downloaded from MapPlace and marking the lineaments, or indicated structures, thereon. A total of 57 lineaments were marked (Figure 5), compiled into a 10 degree class interval, and plotted as a rose diagram as indicated on Figure 6.

**Figure 5. Indicated Lineaments on Tenure 966129**

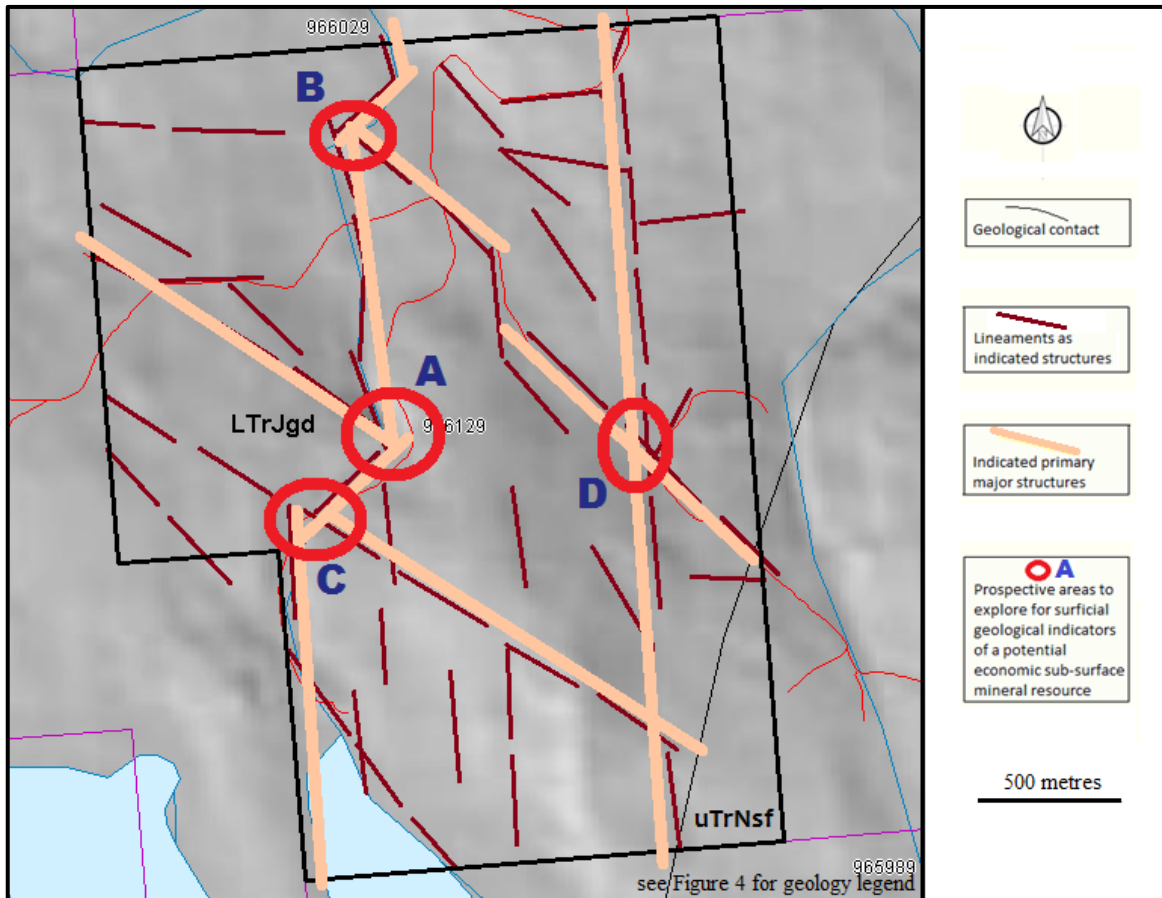
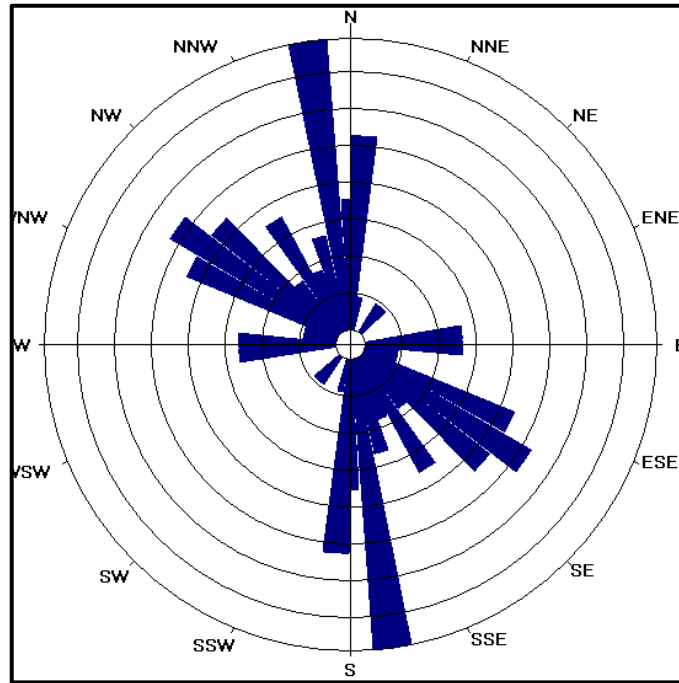


Figure 6. Rose Diagram from lineaments (Figure 5) of Tenure 966129.



**STATISTICS**

Axial (non-polar) data  
 No. of Data = 57  
 Sector angle = 8°  
 Scale: tick interval = 2% [1.1 data]  
 Maximum = 15.8% [9 data]  
 Mean Resultant dir'n = 150-330  
 [Approx. 95% Confidence interval = ±21.5°]  
 (valid only for unimodal data)

Mean Resultant dir'n = 150.1 - 330.1  
 Circ. Median = 146.0 - 326.0  
 Circ. Mean Dev. about median = 28.9°  
 Circ. Variance = 0.18  
 Circular Std. Dev. = 35.62°  
 Circ. Dispersion = 1.98  
 Circ. Std Error = 0.1866  
 Circ. Skewness = 1.81  
 Circ. Kurtosis = -17.43  
 kappa = 1.04

(von Mises concentration param. estimate)

Resultant length = 26.32  
 Mean Resultant length = 0.4617

'Mean' Moments: Cbar = 0.2326; Sbar = -0.3988

'Full' trig. sums: SumCos = 13.2568; Sbar = -22.7338

Mean resultant of doubled angles = 0.1539  
 Mean direction of doubled angles = 000

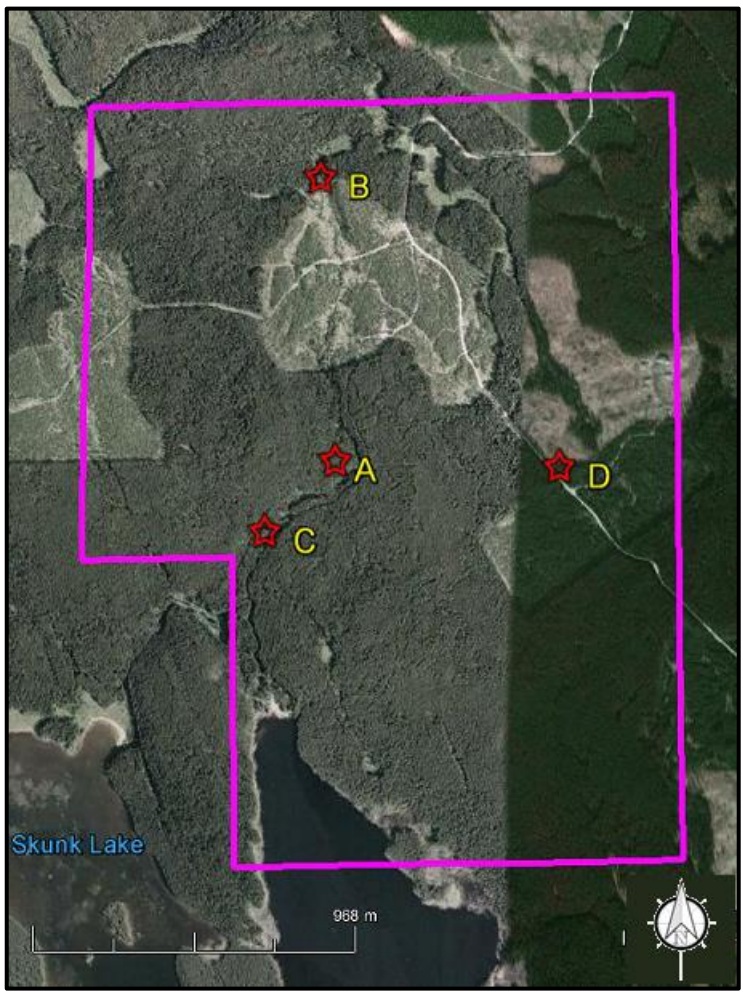
(Usage references: Mardia & Jupp, 'Directional Statistics', 1999, Wiley; Fisher, 'Statistical Analysis of Circular Data',

1993, Cambridge University Press)

Note: The 95% confidence calculation uses

Fisher's (1993) 'large-sample method'

**Figure 7. Cross structural locations (Figure 5) on Google Earth**  
 (Base Map: Google Earth)



**Table II. Approximate UTM locations of Figure 5 cross-structures,**  
 (UTM-NAD 83)

Location	UTM East	UTM North	Elevation
A	700,729	5,534,315	1,516
B	700,646	5,535,187	1,473
C	700,523	5,534,097	1,522
D	701,408	5,534,309	1,507

## INTERPRETATION and CONCLUSIONS

Four structural intersections were delineated on Tenure 966129. These intersections could have developed localized zones, or pipes, of intense fracturing and brecciation to depth which could have tapped or provided subsequent mineral controlling features for any hydrothermal mineralizing solutions that may have been deposited in the progress to the surface. The surficial geological indicators may be revealed as minerals and/or alteration products that would be subject to interpretation for a potential underlying mineral resource.

Two past productive deposits, Elk and the Brenda, located within 15 kilometres of the Toni 966129 Claim Group (Figure 2), are primary examples of this mineral controlling feature.

At Brenda, the mineral deposit, which was created through recurrent fracturing and deposition of minerals within the newly created spaces, are a function of fracture (vein) density and of the thickness and mineralogy of the filling material. The mineralisation, within the localized Brenda stock which forms part of the Pennask batholith, decreases outwardly from the most intensely fractured/mineralised rock and the centre of the main mineral zone.

At the Elk gold-silver property, the mineral zones appear to be distributed along the northerly trending Elk fault system which is evidenced topographically for a minimum of 25 kilometres from, and not necessarily restricted to the limits of the formerly productive Elk property in the south, to and beyond the SNOW mineral showing (*Minfile 092HNE292*) in the north. The mineral zones are proximal to the Elk fault and controlled by structural intersections with east-northeasterly trending faults. Gold-silver mineralisation is hosted primarily by pyritic quartz veins and stringers in altered pyritic granitic and, less frequently, volcanic rocks.

For mineral deposit types such as skarn, vein, or porphyry mineralization mineral deposit types that may occur within the Toni 966129 Claim Group, reference is made to the eight Minfile properties as described with the name and location on Figure 4. The Minfile descriptions included in the report are copied from the BC Government Minfile records.

Thus, the four structural intersections on Tenure 966129 should be the primary areas to explore for surficial geological indicators of potentially economic mineral resources to depth.

Respectfully submitted

Sookochoff Consultants Inc.



Laurence Sookochoff, PEng

## SELECTED REFERENCES

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AR 23,446.

**Clayton, C.J.** -1991: Assessment Report on 1990 Geological Mapping and Sampling, and Soil Geochemistry of the Wart Group for Minnova, Inc. **AR 20,994C**

**Holcombe, R.** – 2009: GEORient, ver 9.4.4. Stereographic Projections and Rose Diagram Plots

**Kierans, M.D.** -1972: Mineral Exploration Report on the Hill Group, Wart Mountain Area for Nitracell Canada Ltd. **AR 4,230.**

**MapPlace** – Map Data downloads

**Marshak, S., Mitra, G.** – Basic Methods of Structural Geology. pp 258-259, 264\*.Prentice-Hall Inc. 1988

**MtOnline** MINFILE downloads

082ENW003– NORTH BRENDA-CENTRAL

082ENW043 – MARN 16

092HNE047 – BRENDA

092HNE292 – SNOW

082ENW297 – KING 6

082ENW301 – PEN 8

092HNE311 – WAVE 1

092HNE312 – WAVE 2

**Sookchoff, L.** 2010: Geological Assessment Report on Tenure 589950 of the Toni 589950 Claim Group for Victory Resources Corporation. **AR 31,669.**

**Sookchoff, L.** 2013: Geological Assessment Report on Tenure 589853 of the Toni 589853 Claim Group for Victory Resources Corporation. **AR 34,074.**

**STATEMENT OF COSTS**

Work on Tenure 966129 was done from September 29, 2013 to October 2, 2013 to the value as follows:

**Structural Analysis**

Laurence Sookochoff, P Eng. 2.5 days @ \$ 1,000.00/day ---	\$ 2,500.00
Maps -----	1,000.00
Report -----	<u>3,500.00</u>
	\$ 7,000.00
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## **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 forty-seven years.
- 3) I am registered and in good standing with the Association of Professional Engineers and Geoscientists of British Columbia.
- 4) The information for this report is based on information as itemized in the Selected Reference section of this report and from work the author has performed on the Toni Property since 2006.
- 5) I have no interest in the Toni 966129 Claim Group as described herein.
- 6) I am a director of Victory Resources Corporation.



Laurence Sookochoff, P. Eng.