

# **DISCOVERY VENTURES INC.**

*(Owner)*

# **BCT MINING CORP.**

*(Operator)*

## **GEOLOGICAL ASSESSMENT REPORT**

*(Event 5444943)*

*on a*

## **STRUCTURAL ANALYSIS**

*Work done on*

**Tenure 600429**

*of the 10 Tenure*

**Gold 600429 Claim Group**

**Lillooet Mining Division**

**BCGS Map 092J.076/.077**

**Centre of Work**

**5,623,900N, 517,100E (NAD 83)**

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**BC Geological Survey  
Assessment Report  
33875**

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## SUMMARY

The Gold 600429 Claim Group is located within five kilometres (from the three structural intersection areas of Tenure 600429) of the producing Bralorne Mine which was the largest gold producer in British Columbia yielding over 2.8 million ounces of gold and over seven million ounces of silver. The Pioneer Mine, south of the Bralorne, and situated along the same greenstone belt within two kilometres of the Gold 600429 Claim Group, produced over 1.3 million ounces of gold and 25 million ounces of silver.

Currently, Bralorne Pioneer Gold Mines Ltd. has incorporated all the historic producers into one property which is comprised of 154 Crown Granted Mineral Claims, 2 reverted Crown Grants and 18 metric unit cell claims. Production at the Bralorne property commenced in 2011.

Approximately 25% of the staked ground of the 600429 Claim Group covers Crown Grants owned by Bralorne Gold Mines including a portion of Tenure 600429 (*Figure 4*), the site of the Structural Analysis (*Figures 3 & 11*) on which this report is based.

The Cadwallader fault is a major “break” that extends more than 50 kilometers along strike and is tentatively interpreted as a crustal transform fault (Church, 1996). This fault is considered to a controlling structure on the localization of the Bralorne-Pioneer gold deposit as it changes strike abruptly in the immediate area of gold deposits. In addition, all of the gold production came from veins situated between the Cadwallader fault and the Fergusson fault, which may be a splay fault

Most of the retained ground of Tenure 600429 is the eastern portion and is within 500 metres north of the Cadwallader fault. The results of the Structural Analysis indicated three cross-structural locations that are associated with an indicated primary S1 major northerly trending structure. All three are associated with a northerly primary structure which has been offset by secondary structures as shown in the configuration of the watercourse depression. Two of the cross structures, A & C, are associated with east-west structures which appear as possible primary S1 or secondary S2 structures and are indicated to cross the entire width of the subject claim. One cross structure, B, appears as a four structure intersection located within the confines of the prime northerly structure which is indicated to be offset 100 metres to the east by the block faulting of the two east-west structures.

The east-west structures hosting the mineralization at the Holland mineral prospect 500 metres west of location C may be the surficial indication of a deep-seated mineral resource whereby mineralizing fluids reached the surface via the restrictive shear zone. The structural intersection location would be the most favourable route for the transit of these fluids to or near the surface where any degree of geological indicators would be etched.

A recommended exploration program of localized VLF-EM, magnetometer, and geochemical surveys over each of the three structural intersection areas marked A, B, and C on Figure 11 be completed. The particulars for the surveys are set out in the Recommendations section of this report.

## INTRODUCTION

In March 2013 a Structural Analysis was completed on Tenure 600429 of the ten claim Gold 600429 Claim Group (“Property”). The purpose of the program was to delineate structures which may be integral in geological controls to potentially economic mineral zones that may occur on Tenure 600429, or other claims of the Property.

Information for this report was obtained from sources as cited under Selected References and from periodic mineral exploration work the author has performed in the Goldbridge area since 1985.

Figure 1. Location Map



## PROPERTY DESCRIPTION AND LOCATION

The Property is comprised of ten claims covering an area of 1573.454 ha hectares and is located within BCGS Map 092J.076/.077 of the Lillooet Mining Division, 173 direct kilometres north-northeast of Vancouver, and 80 kilometres west of Lillooet, a town serviced by a railroad with a terminus at Vancouver.

Table 1. Mineral Tenures of the Gold 600429 Claim Group

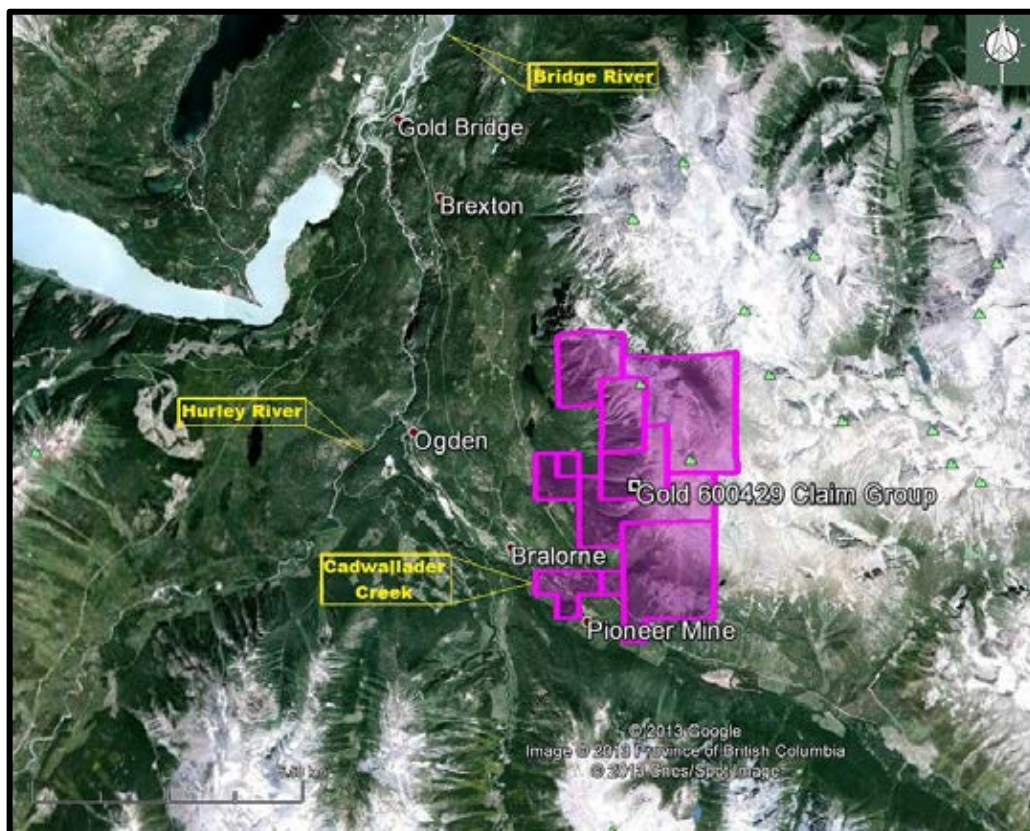
<u>Tenure Number</u>	<u>Type</u>	<u>Claim Name</u>	<u>Good Until</u>	<u>Area (ha)</u>
<a href="#">576919</a>	Mineral	BRALORNE 8	20140901	163.413
<a href="#">577083</a>	Mineral	BRALORNE 6	20140901	122.5817
<a href="#">577480</a>	Mineral	PIONEER 4	20140901	81.7706
<a href="#">600429</a>	Mineral	BRALORNE CAMP 3	20140901	347.5086
<a href="#">600447</a>	Mineral	BRAMEAD	20140901	20.4336
<a href="#">600904</a>	Mineral	BRALORNE CAMP 2	20140901	388.1545
<a href="#">638803</a>	Mineral	BRALEX	20140501	224.8057
<a href="#">708126</a>	Mineral	BRALEX N	20140901	143.0396
<a href="#">740703</a>	Mineral	BROCK	20140901	61.3045
<a href="#">740713</a>	Mineral	PIONEER 1	20140901	20.4422

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

Two access routes from Vancouver are available. One is northward via Pemberton and the Hurley River Forest Access road to Goldbridge; a distance of some 215 kilometres. The second is eastward via Hope, Lytton, and Lillooet to Goldbridge; a distance of some 440 kilometres. Although the first route is shorter, the Hurley River road portion is all gravel with steep, switch-backed sections and not maintained during the winter season whereas the second access is via all paved roads except for short sections of gravel from Lillooet to Goldbridge.

The Gold 600429 Claim Group is some four kilometres from Goldbridge with access southward for six kilometres along a road paralleling Hurley River thence on a road for three kilometres paralleling Cadwallader Creek.

Figure 2. **Claim Location**  
(base map from MapPlace & Google Earth)



The general Bralorne area, an historic mining centre, could be a source of experienced and reliable exploration and mining personnel. Goldbridge has suitable accommodations for any exploration and initial development crews. Lillooet, some 80 kilometre distant is serviced by a railroad. Vancouver, a port city on the southwest corner of, and the largest city in, the Province of British Columbia is six hours distant via the all-weather Lillooet route.

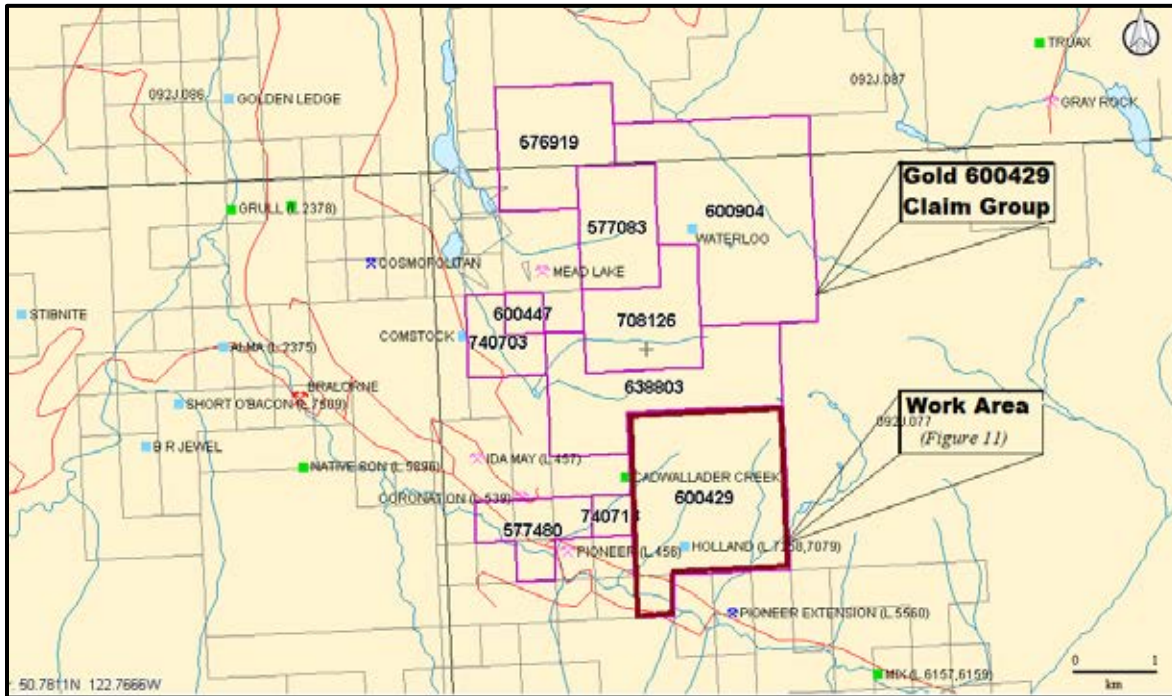
Annual precipitation is moderate with generally dry summers. Winter months receive moderate to heavy snowfall with snow accumulations exceeding three meters at the higher elevations. At the property elevation the snow free period would generally be from April to December.

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 property.

**ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY (cont'd)**

The region is characterized by mountainous terrain with deeply incised stream valleys and moderate to steep slopes, and relief is approximately 650 metres. Elevations on Tenure 600429 range from 1,250 metres within the Cadwallader Creek valley in the southwest to 2,400 metres on the uppermost slopes at the crest of the valley in the northwest

**Figure 3. Claim & Index Map**  
(base map from MapPlace)



**Figure 4. Claim Map with covered Crown Grants**  
(base map from MapPlace)

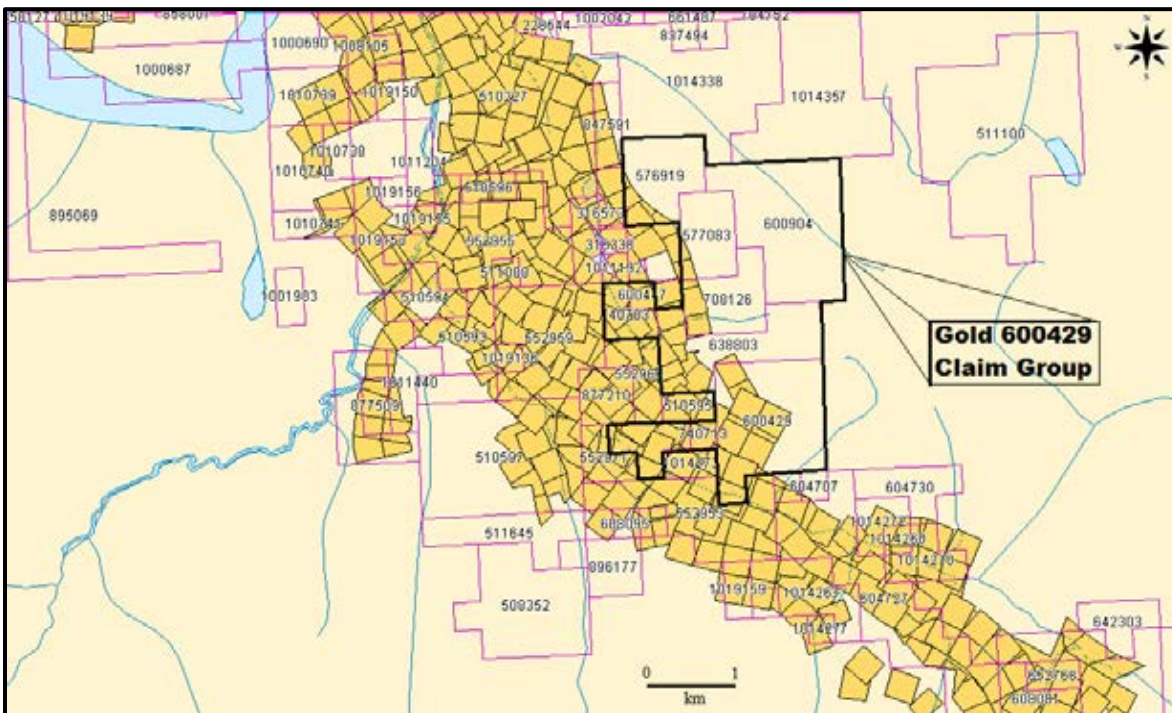


Figure 5. **Town of Bralorne** (*The Early Years*)  
(BC Archives # C-08636)



Figure 6. **Bralorne B.C Townsite** (*The Early Years*)  
(Artie Phair postcard)



Figure 7. **Bralorne Mine** (*The Early Years*)  
(BC Archives # 1-29096)





Figure 8. **Bralorne Mill** (*The Early Years*)  
(BC Archives # C-08637)



## HISTORY: PROPERTY AREA

The Bridge River area is one of British Columbia's oldest gold camps. Production commenced in 1858 when placer gold was recovered from Bridge River, near its confluence with the Fraser River. The placer gold was followed upstream from the Fraser, and in 1859, a second discovery was made on Gun Creek, near its confluence with the Bridge River, close to the (then) future site of the Minto Mine. Extensive placer operations were also initiated on Tyaughton and Hurley Rivers and on Cadwallader Creek. It wasn't until the late 1800's, however, that an interest emerged in identifying the placer source; this led to the discovery of the Bralorne and the Pioneer deposits near the turn of the century. The Bralorne Mine became the largest gold producer in the region, yielding over 2.8 million ounces of gold and over 7 million ounces of silver. The Pioneer Mine, south of the Bralorne, and situated along the same greenstone belt, produced over 1.3 million ounces of gold and 25 million ounces of silver.

The mineralization on some of the more significant mineral MINFILE reported showings, prospects, and past producers on and peripheral to the Gold 600429 Claim Group are reported as follows. The distance is relative to the structural intersections on Tenure 600429 of the Gold 600429 Claim Group.

### **BRALORNE** producer (Au-quartz veins)

MINFILE 092JNE001

Five kilometres northwest

*Bralorne Pioneer Gold Mines Ltd., in a joint venture with International Avino Mines Ltd., plans to re-open the historic Bralorne mine encompassing the combined Bralorne, Pioneer (092JNE004) and Loco (092JNE164) properties, following issuance of a Mine Development Certificate in March 1995. Initial underground mining will be from the formerly producing Bralorne 51 vein area where detailed exploration programs, in recent years, have outlined proven, probable and possible reserves of 570,000 tonnes grading 8.22 grams per tonne gold. Proven and probable reserves above the 800 level and readily available for extraction total 432,500 tonnes grading 10.63 grams per tonne gold. There are also reserves of 549,125 tonnes grading 9.26 grams per tonne gold below the 800 level (Information Circular 1997-1, page 20). The nearby Countless vein on the Loco property has 110,000 tonnes probable and possible reserves grading 17.1 grams per tonne gold. The Peter vein was drifted along a strike length of 35 metres on the 800 level, 305 metres below the surface (T. Schroeter, personal communication, 1996).*

**History: Property Area (cont'd)****BRALORNE producer (cont'd)**

Mining and milling operations are forecast to start at about 100 to 125 tonnes per day, increasing to 400 tonnes per day at a later date. Mill tune-up and production is scheduled for mid-March 1997. Milling machinery, purchased from Zabellos, is being assembled at the property and the mill building has been rehabilitated (Information Circular 1996-1, page 17).

In 1995, Bralorne Pioneer Gold Mines Ltd., and partner International Avino Mines Ltd., with support from the Explore B.C. Program, carried out an extensive exploration program including trenching and 650 metres of surface diamond drilling in 7 holes on the Maddie zone resulting in the discovery of new veins. Underground work on the 800 level consisting of 233 metres of drifting, 100 metres of crosscuts and 544 metres of diamond drilling in 4 holes traced the Peter and Big Solly veins to and beyond a crossfault (Explore B.C. Program 95/96 - A32).

In 2003, Bralorne-Pioneer Gold Mines Ltd resumed construction of a 125 tonne-per-day pilot plant test mill and began construction of a tailings pond. Trenching and drilling were done in the area of the Peter, Cosmopolitan and Big Solly veins on the Loco property. Bralorne also did rehabilitation work on the 800 level in the Bralorne mine. In early 2004, Bralorne plans to mine a 6000 to 8000 tonne bulk sample from the Peter vein, which will be processed in the pilot mill. The drilling program consisted of 15 NQ holes totaling 1751.5 metres and was designed to provide additional information on the Peter vein and associated structures in the area beneath the upper level workings and also along strike to the north and south.

In 2004, Bralorne completed construction of a tailings pond to allow five years of production, and began test milling using a small (approximately 100 tonne-per-day) gravity/flotation pilot plant. As of mid-August more than 10 000 tonnes had been processed through the plant, producing about 141 dry tonnes of concentrate. Most of the material processed was from low-grade stockpiles with some additional material coming from the Upper Peter vein (4230 adit) on the Loco (or Cosmopolitan) property. A small amount of dore gold was produced onsite, and about 20 tonnes of flotation concentrate was shipped.

Bralorne also did underground development to prepare a stope on the Peter vein on the 800 level of the King mine workings, and drove a decline from the 4230 level to access a new level 30 metres deeper. Surface drilling returned encouraging results from the 51B vein in the gap between the Bralorne and Pioneer mine workings, and a new 180-metre long adit is being driven to access this area.

The following resource estimates were reported in *The Northern Miner*, April 4, 2005. It is not known if they are NI-41101 compliant. The measured resource in the Peter vein comprises 3,425 tonnes grading 8.4 grams gold per tonne. The Peter vein has been drifted on top and bottom with samples taken at 1.8 metre intervals across the exposed vein. The upper Peter vein contains another 22,738 tonnes grading 9.7 grams gold in the inferred category. The indicated mineral resource in the 51B FW vein is reported at 17,729 tonnes grading 11 grams gold. The resource was based on 43 diamond drill holes drilled this winter and five historic drill holes.

The 51B FW vein intersected by the Area 51 cross-cut yielded considerably higher grades of up to 21.1 grams gold over 1.5 metres. Another inferred resource of 389,964 tonnes grading 10.4 grams gold sits above the 800-level.

In a June 2009 Technical Report on Bralorne Pioneer Mine Property updated resources were 17,627 tonnes measured grading 16.24 grams per tonne

**History: Property Area (cont'd)****PIONEER** past producer (Au-quartz veins)

MINFILE 092JNE004

Two kilometres west

*The Pioneer mine has been worked on 27 levels to a depth of 1,020 metres from 5 shafts. Most of the production came out of the main vein until 1944 and the 27 vein until 1960.*

*The Pioneer property was consolidated with Bralorne Mines in 1959.*

**COSMOPOLITAN** developed prospect (Au-quartz veins)

MINFILE 092HNE164

Five kilometers northwest

*In 1973 additional work was started in the area of the Peter vein where surface work indicated potential mineralized structures. Surface drilling and trenching located the Peter vein and in 1987 an adit was collared to intersect the structure about 33 metres below surface; 65 metres of drifting on the vein averaged 13 grams per tonne gold across an average width of 3.4 feet (Assessment Report 27355).*

*The Peter vein was first opened up on surface in 1987, but apparently had been known from the underground development of the Bralorne mine's King vein. Trenching has now traced the vein along its northwest strike for over 550 metres, with widths varying from a few centimetres to 3 metres. One sample graded 102.86 grams per tonne gold over 2.8 metres (George Cross News Letter No.111, June 10, 1991). The best intersection from 14 holes drilled on the vein graded 16.46 grams per tonne gold over 2.7 metres (George Cross News Letter No.111, 1991). Further drilling proved the existence of the vein to a depth of 167 metres. The type of mineralization that occurs within the vein was not reported but may be assumed to be like that of the King vein for which many similarities have been confirmed.*

*Bralorne-Pioneer Gold Mines Ltd. performed trenching exploration during 2002 and extended the Peter vein by 366 metres to the west. Drilling began on the Peter vein in November, 2002 and 9 holes were completed. Hole #8 returned an assay of 52.28 grams per tonne gold over 1.37 metres.*

*In 2003, Bralorne-Pioneer Gold Mines Ltd resumed construction of a 125 tonne-per-day pilot plant test mill and began construction of a tailings pond. Trenching and drilling were done in the area of the Peter, Cosmopolitan and Big Solly veins on the Loco property. Bralorne also did rehabilitation work on the 800 level in the Bralorne mine. In early 2004, Bralorne plans to mine a 6000 to 8000 tonne bulk sample from the Peter vein, which will be processed in the pilot mill. The drilling program consisted of 15 NQ holes totaling 1751.5 metres and was designed to provide additional information on the Peter vein and associated structures in the area beneath the upper level workings and also along strike to the north and south.*

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## GEOLOGY: REGIONAL (after Ball, 2002)

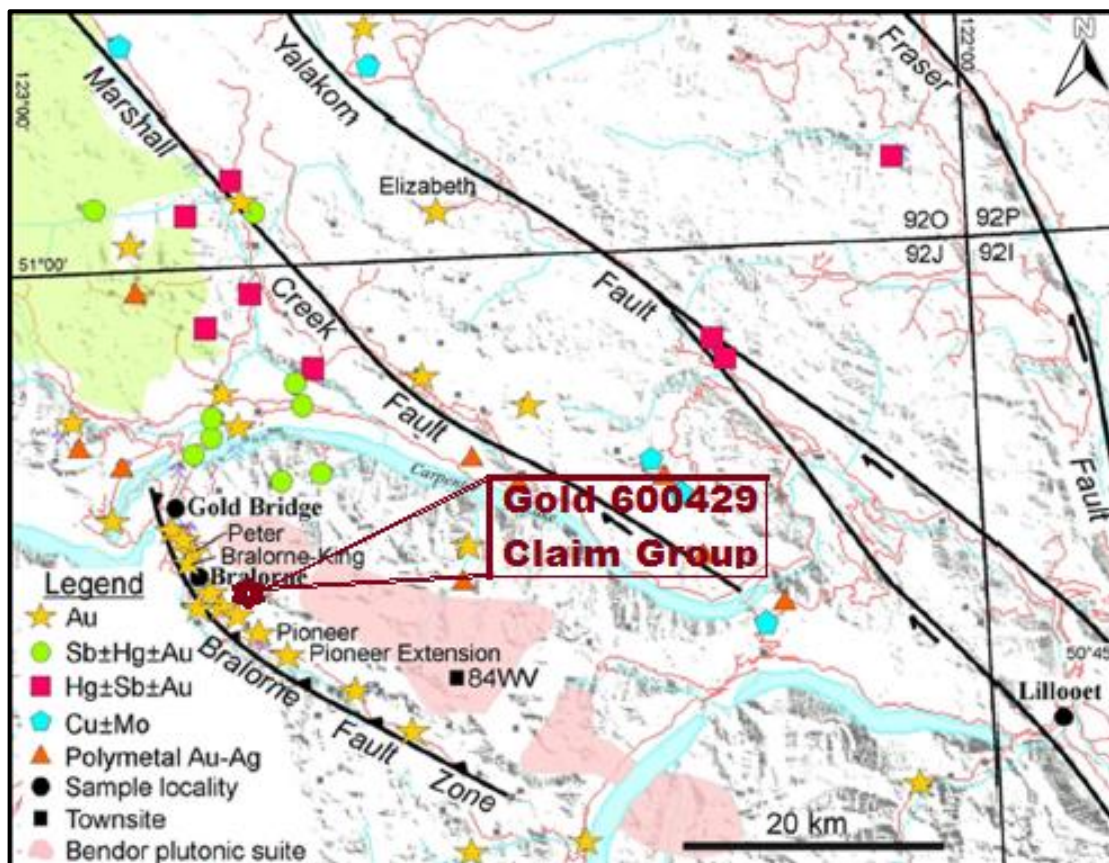
The area is situated at a regional tectonic boundary between the Cache Creek and Stikine allochthonous terrane. Diverse rock units of these two terranes are structurally deformed and imbricated in the area, together with large fault-bounded slices of gabbroic and ultramafic rocks. These early structures are cross cut by later northwest and north-trending major faults related to the Fraser- Yalakom regional fault system, and by Late Cretaceous and Tertiary granitic plutons and related dikes (Church, 1996).

(after Bellamy, 1984)

The productive gold bearing zone in the Bridge River area occurs within a regional northwest striking fault lens that cuts Permian to Jurassic sedimentary volcanic rock units and is known as the Cadwallader fault lens. These units lie between the main Coast Range Batholith and the smaller outlying Bendor plutons. Intruding this fault structure are small granitic to ultrabasic stocks and dykes. The Cadwallader fault lens is an intricate fault system comprised of interlacing reverse, normal and strike-slip faults that form a structural lens approximately two kilometers wide and up to five kilometers long. The gold veins in the fault lens have been mined to a depth of over 1.8 kilometers. The depth persistence of these veins is attributed to the Cadwallader fault system being a deep seated crustal structure that is related to the continental Fraser fault system.

Figure 9. Map of the Bridge River camp showing major faults and mineral deposits.

(base map from Hart et al. 2008)



**GEOLOGY: PROPERTY AREA**

The mineralization on some of the more significant mineral MINFILE reported showings, prospects, and past producers on and peripheral to the Gold 600429 Claim Group are reported as follows. The distance is relative to the structural intersections on Tenure 600429 of the Gold 600429 Claim Group.

**BRALORNE** producer (Au-quartz veins)

MINFILE 092JNE001

Five kilometres northwest

*The area is underlain by Mississippian-Jurassic Bridge River Complex (Group) and Upper Triassic Cadwallader Group sediments and volcanics which are transected by a major north trending, steeply southwest dipping fault known as the Cadwallader Break. The fault is a deep-seated crustal structure related to the Fraser fault system to the south. The fault is intruded by small granitic to ultramafic stocks and dykes. Diorite to gabbro of the Permian Bralorne Igneous Complex, in which most of the quartz veins are hosted, intrudes the Cadwallader Break as an elongate body. Diorite also intrudes Pioneer Formation (Cadwallader Group) greenstones although at times the contact appears gradational. The diorite and greenstone are in turn "intruded" by sodic granite which may be an apophysis of the Early Tertiary Bendor pluton, the main body of which lies 10 kilometres east. The sodic granite also appears gradational with the diorite and exhibits a migmatitic texture, which has led to the conclusion that it may be a late differentiation of the same magma that formed the diorite. The sodic granite occupies the northwest half of the intrusive belt and narrows out north and south.*

*A 60-metre wide belt of serpentinite (Bralorne Igneous Complex) borders the diorite on the southeast at the contact with the Noel Formation (Cadwallader Group). Finally, the intrusive belt is intruded by albitite dykes which often follow the chilled margin of the sodic granite, and where associated with quartz veins, the dykes are altered to platy quartz-sericite schist. The principal host rock is the diorite, and an abnormal richness in gold was noted when veins neared the serpentinite; it has been suggested that the serpentinite acted as a dam to mineralized solutions.*

*The veins also followed the albitite dykes and vein structures extend into other rock types (greenstones and sodic granite).*

*The age of the mineralization is constrained by three sets of isotope data; a zircon from a pre-syn mineralization albitite dike returns 91.4 +/- 1.4 Ma, while a K/Argon from a hornblende and the containing whole rock from a syn-post mineralization hornblende porphyry dike is 85.7 +/- 3 Ma.*

*Argon/Argon step heating of associated mariposite gives a minimum age of mineralization of 70 - 80 Ma (Bulletin 108, page 47-48).*

*The lens hosting quartz veins is five kilometres long by 2 kilometres wide and has a complex interlacing fault system. The main producing veins generally strike east and dip varying degrees to the north, in reverse fault zones extending from the Fergusson fault (northeast dipping) to the Cadwallader fault (southwest dipping). This zone between the faults grows wider with depth, and veins are persistent, having been mined to nearly a 2 kilometre depth. Diagonal "crossover" veins host many secondary veins which are commonly brecciated.*

*The Bralorne mine is divided into 3 main sections, the Crown, Empire and King. The principal veins in the Crown and Empire sections are known as the 51 and 77 veins, their faulted extensions, the 55 and 53 veins respectively, and crossover veins 59, 73, 75 and 79. The main veins in the King section are the North, Shaft, King, Alhambra and C veins. For descriptive purposes, the 51 (and 55) and 77 (and 53) veins are treated separately, under the names of the original mines, before amalgamation into Bralorne Mines. These are the Ida May mine (Empire and Blackbird) for the 51 vein - see 092JNE002, and the Coronation mine (Little Joe and Countless) for the 77 vein - see 092JNE007. The most prolific vein was the 77.*

**Geology: Property Area (cont'd)****BRALORNE producer (Au-quartz veins) (cont'd)**

Generally, the veins average 1.5 metres in width and range up to 6 metres. They are often tabular, well-ribboned or partly ribboned, and partly massive or brecciated. All types have hosted ore, although the best values came from ribboned veins. The gangue minerals are quartz, calcite, mariposite, talc and scheelite. The principal sulphides are pyrite, arsenopyrite and sphalerite, which along with native gold, galena, chalcopyrite, pyrrhotite and tetrahedrite occupy less than one per cent of the veins. Carbonate alteration (siderite) is widespread with albite occurring along vein shears. The Bralorne mine was accessible by 4 main shafts and worked on 44 levels.

**Bralorne Area Geology (from Ball, 2002)**

The local geological setting is characterized by fault-bounded blocks of various litho-tectonic units of the Cadwallader and Bridge River Terranes. The central block is comprised of steeply dipping turbidite, argillite, and basaltic andesite of the Cadwallader Terrane, intruded by hornblende, diorite and sodic granite of the Bralorne intrusions dated at 263 to 290 Ma (Church, 1996). This block is bounded to the southwest by the Cadwallader fault, along which slivers of serpentinized ultramafic rocks occur. Sedimentary and volcanic units of the Cadwallader Terrane also occur southwest of this fault. The Fergusson fault bounds the Cadwallader Terrane on the northeast, and separates it from ribbon chert, argillite and basalt of the Bridge River Terrane.

All these units have been metamorphosed at sub- to lower greenschist grade (Leitch, 1990). In addition, a swarm of mafic to felsic dikes intrudes all of the units, and includes hornblende porphyry dated at 85.7 Ma, albitite dated at 86-91 Ma, plagioclase porphyry and lamprophyre (Leitch, 1989). Table 1 shows the local table of stratigraphic units used in this report.

The Cadwallader fault is a major "break" that extends more than 50 kilometers along strike and is tentatively interpreted as a crustal transform fault (Church, 1996). This fault is considered to be a controlling structure on the localization of the Bralorne-Pioneer gold deposit because it changes strike abruptly in the immediate area of gold deposits. In addition, all of the gold production came from veins situated between the Cadwallader fault and the Fergusson fault, which may be a splay fault.

The Fergusson fault appears to splay off the main break south of the productive area, cuts across the internal angle in the bend of the Cadwallader fault, and rejoins the Cadwallader fault north of the area of mining. Church (1996) interpreted this area as a left lateral shear couple, in which gold-quartz veins formed within extension and shear fractures between the bounding faults.

**Bralorne Geological Model (from Ball, 2002)**

The Bralorne-Pioneer gold deposit is comprised of 30 separate gold-quartz veins developed over a strike length of 4.6 kilometers (2.9 miles) and a vertical extent of 1900 meters (6200 feet). The vein system was exploited from three separate mine areas of shaft and drift level development. These included, from north to south, the King, Bralorne and Pioneer mine areas (Figure 4). The outstanding feature of this deposit is the vertical continuity of the veins. The largest vein mined was the Ida May, Empire vein or 51 vein, which was 1480 meters in strike length and 854 meters in vertical extent. The Main vein was developed over 1140 meters in strike and 1074 meters in vertical extent (Church, 1995).

The great vertical continuity of the vein system and individual veins is one of the main contributing factors to the large size of the Bralorne-Pioneer gold deposit. The veins are composed of quartz with minor carbonate, sericite, sulphides, scheelite and native gold. The gold contains 10 to 20% silver and less than 4% mercury. Sulphides average 1 to 3% of the veins and include pyrite, arsenopyrite, chalcopyrite and sphalerite, with minor pyrrhotite, galena and tetrahedrite. Talc and fuchsite occur within veins and their alteration haloes close to serpentine. The veins are commonly ribbon-banded, with numerous septa of altered wall rock.

**Geology: Property Area (cont'd)****Bralorne Area Geology (from Ball, 2002) (cont'd)**

*These features are typical of quartz veins formed by the "crack-seal mechanism" (Ramsey, 1980) of repeated episodes of brittle hydraulic failure, related to periods of supralithostatic fluid pressures, during regional progressive deformation (Sibson and others, 1988).*

*Brecciation within the veins has been attributed to post-mineral reactivation of the vein structures. Wall rock alteration is commonly developed as meter to decimeter-scale envelopes to the veins. The alteration grades outwards from quartz-sericite-carbonate- albite-pyrite to epidote -chlorite-calcite. In the historic operations, up to 75% of the gold was recovered by gravity concentration. The remaining gold was recovered in a flotation concentrate, later replaced by cyanidation and local refining.*

**PIONEER** past producer (Au-quartz veins)

MINFILE 092JNE004

Two kilometres west

*The veins are hosted mainly in Pioneer Formation greenstone of the Upper Triassic Cadwallader Group and in sodic granite, either associated with the Permian Bralorne Igneous Complex, or the Cretaceous to Tertiary Bendor pluton. The soda granite extends as a narrow tongue along the northwest border of the Bralorne diorite, which hosts the Bralorne deposits (092JNE001) directly north. At the Pioneer mine, the diorite pinches out between soda granite and the serpentinite in the Cadwallader break.*

*The main vein structure strikes between 280 and 285 degrees and dips steeply north. The vein is 1 metre wide and has a strike length of 1140 metres.*

**CORONATION** past producer (Au quartz veins)

MINFILE 092JNE007

Seven kilometres west

*The Little Joe (or Coronation) vein, later known as the 77 vein, was found in the footwall of the 51 vein (or Ida May/Empire vein - 092JNE002). The 77 vein is hosted mainly in diorite of the Permian Bralorne Igneous Complex; it trends east from a serpentinite (President Ultramafics, correlative with the Permian and older Shulaps Ultramafics) belt/fault on its northwest end then is sharply deflected southeast along the border of a sodic granite intrusion that is related to the Bralorne complex or the Cretaceous to Tertiary Bendor pluton.*

*The vein extends into the contact zone between the granite and Upper Triassic Pioneer Formation, Cadwallader Group greenstone where it gradually peters out. The vein is richest and widest where it is steepest and where it approaches the sodic granite body, ie. on its eastward trend.*

*The 53 vein, the faulted extension of the 77 vein, is described as wide and strong and gradually steepens as it approaches the serpentine belt. Both the 77 and 53 veins contain numerous branches in the foot and hanging walls. For detailed geology setting around the Bralorne mine refer to 092JNE001.*

**HOLLAND** prospect (Au quartz veins)

MINFILE 092JNE008

500 metres west

*One kilometre northeast of Cadwallader Creek, 3.5 kilometres south of Bralorne. Location of Holland adit (Assessment Report 16682).*

*The property is underlain by Mississippian to Jurassic meta- sediments of the Bridge River Complex (Group) including thinly bedded cherts, argillites and quartzites with small lenticular masses of andesite (possibly dykes?). Greenstones of the Upper Triassic Pioneer Formation, Cadwallader Group are faulted against the meta- sediments, which are intruded by granitic rock of the Cretaceous to Tertiary Bendor Pluton, about 1 kilometre east.*

**Geology: Property Area (cont'd)****HOLLAND** prospect (Au quartz veins) (cont'd)

Five quartz-calcite veins are reported in the east trending Holland adit. The veins occur along fissures in greenstone and at the contact between greenstone and quartzite. The average width is 0.6 metres but the veins are inconsistent and pinch out in soft sheared argillite.

The vein strikes at 090 and dips at 40N and has a strike length of nine metres.

**PIONEER EXTENSION** developed prospect (Au quartz veins)

MINFILE 092JNE009

600 metres south

The Pioneer Extension property lies between Noel and Chism Creeks, along the southwest side of Cadwallader Creek, in the Pacific Coast Range. In this part of the Coast Crystalline tectonic belt, extensive splays and cross faults of the Bralorne fault system are spatially related to numerous mineral occurrences in the Bridge River mining camp. Mississippian to Jurassic Bridge River Group cherts are faulted against greenstone of the Pioneer Formation and metasedimentary rocks of the Hurley and Noel formations, all of the Upper Triassic Cadwallader Group.

Dykes and stocks of augite-diorite and soda-granite of the Bralorne Igneous Complex, serpentinized peridotite of the President Ultramafics (correlative with the Permian and older Shulaps Ultramafic Complex) and late hornblende and feldspar porphyry dykes are emplaced concordant to the principal formations, following the trend of the main faults.

Banded, discontinuous quartz veins occur in two sets striking northwest and northeast, following fractures in the competent greenstones and crystalline plutonic rocks. Principal production came from 4 large veins, the 77, 51, 21 and the main vein. The main vein strikes due east, dips shallowly north and averages 1.2 to 2.0 metres wide, over a strike length ranging from 1000 to 1500 metres. The vein extends down-dip for 1500 to 2000 metres.

**WATERLOO** prospect (Au-quartz veins. Main vein Strike/Dip: 071/61N; 3 other 050/50NW)

MINFILE 092JNE019

Three kilometres north

Showings on ridge north of Mount Fergusson, about 4 kilometres northeast of Bralorne townsite.

North trending and steeply dipping andesites, cherts and quartzites of the Mississippian to Jurassic Bridge River Complex (Group) are faulted against diorite and quartz diorite of the Cretaceous to Tertiary Bendor pluton. All rocks are hornfelsed and the volcanics are sheared and chloritized, with pronounced oxidation around the showings. Other hydrothermal alteration products in the area include epidote, calcite and chalcedony.

**COMSTOCK** prospect (Au quartz veins Strike/Dip: 337/60N)

MINFILE 092HNE103

Three kilometres northwest

One and one half kilometres northeast of Bralorne, due south of Mead Lake. Known to be near to Lot 5920; main showing is either on Lot 5745 (Homestake) or Lot 5744 (Comstock 2).

The Bradley vein on the Comstock property is hosted in volcanics and sediments of the Mississippian to Jurassic Bridge River Complex (Group). The vein is in mostly greenstones but extends into argillites a few hundred metres to the east.



**Geology: Property Area (cont'd)****CADWALLADER CREEK** showing (Vein, Massive; Ultramafic-hosted talc magnesite)

MINFILE 092HNE113

One kilometer west

*Located above the Pioneer mine (092JNE004) (Geological Survey of Canada Memoir 213, page 71)*

*The Cadwallader Creek talc showing occurs in sediments of the Mississippian to Jurassic Bridge River Complex (Group) consisting of chert and argillite. Serpentinite of the President Ultramafics, which are thought to be correlative with the Permian and older Shulaps Ultramafic Complex, also occur.*

*Generally, the talc is associated with approximately equal amounts of ankerite and contains serpentine, disseminated sulphides (mostly pyrite), magnetite and chromite. The colour varies from creamy white to dark reddish purple. The believed source of the altering thermal solutions are the late siliceous differentiates of the nearby Permian Bralorne Igneous Complex or, less likely, the Cretaceous to Tertiary Bendor pluton.*

**COSMOPOLITAN** developed prospect (Au-quartz veins)

MINFILE 092HNE164

Five kilometers northwest

*The property adjoins to the north the King mine production levels of the Bralorne mine (092JNE001) at Goldbridge (George Cross News Letter No.111, June 10, 1991). Located approximately 1.5 kilometres north of the town of Bralorne and 0.5 kilometres west of Mead Lake. Access is from the power-line road which connects the property directly to the town of Bralorne.*

*The area of the Peter vein is underlain by Mississippian to Jurassic Bridge River Complex (Group) and Upper Triassic Cadwallader Group sediments and volcanics which are transected by a major north trending, steeply southwest dipping fault known as the Cadwallader Break. The fault is a deep-seated crustal structure related to the Fraser fault system to the south. The fault is intruded by small granitic to ultramafic stocks and dykes. Diorite to gabbro of the Permian Bralorne Igneous Complex, in which most of the quartz veins are hosted, intrudes the Cadwallader Break as an elongate body. Refer to the Bralorne mine (092JNE001) for further details of the geology.*

*The Peter vein maximum width is 3 metres but its minimum width is a few centimetres. Bulletin 108, page 133.*

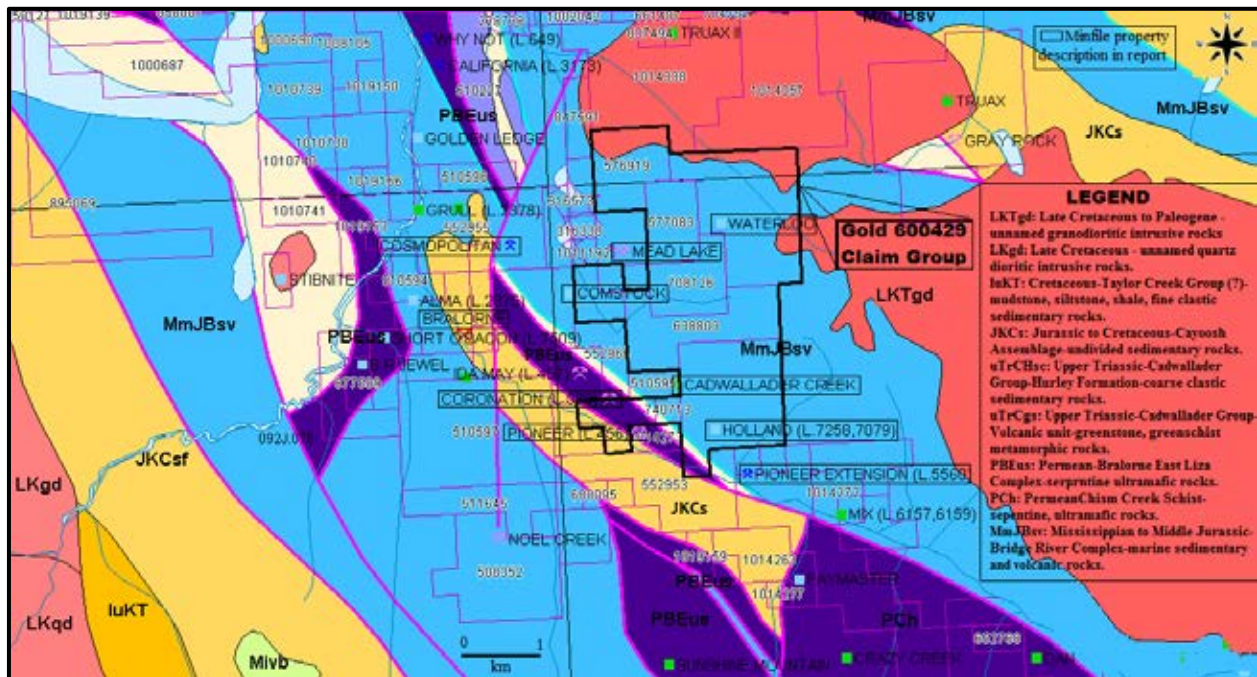
**GEOLOGY: PROPERTY**

As indicated by the BC government supported MapPlace geological maps (Figure 10), the central portion of the Gold 600429 Claim Group is predominantly underlain by the Mississippian to Middle Jurassic Bridge River Complex comprised of marine sedimentary and volcanic rocks.

In the extreme southwest the Bridge River Complex is in a conformable northwesterly contact with a sliver of upper Triassic Cadwallader Group of greenstone, greenschist and metamorphic rocks (uTrCHsc) which is in fault contact (Fergusson Fault) with the 100 metre wide Permian Bralorne East Liza Complex of serpentine ultramafic rocks (PBEus) which at the southwest tip covers the Cadwallader Fault contact with the Jurassic to Cretaceous Cayoosh Assemblage of undivided sedimentary rocks (JKCs).

The eastern and a portion of the northern Tenure 600429 ground is the only ground held by the company as the western portion is comprised of crown grants owned by Bralorne Gold Mines. The Company portion is wholly underlain by the Bridge River Complex and is the location of the three structural intersections.

Figure 10 **Property Geology**  
(base map from MapPlace)



## MINERALIZATION: PROPERTY AREA

The mineralization on some of the more significant mineral MINFILE reported showings, prospects, and past producers on and peripheral to the Gold 600429 Claim Group are reported as follows. The distance is relative to the structural intersections on Tenure 600429 of the Gold 600429 Claim Group.

**BRALORNE** producer (Au-quartz veins)

MINFILE 092JNE001

Five kilometres northwest

**MINERALIZATION** (from Beacon Hill Consultants, 2012)

*The gold-quartz veins form an approximate en echelon array. They have strike lengths of as much as 1500 m between bounding fault structures, and extend to at least 2000 m in depth, with no significant changes in grade or style of mineralization recorded. Ores consist mainly of ribboned fissure veins with septa defined by fine-grained chlorite, sericite, graphite or sulphide minerals. Massive white quartz tension veins also comprise some of the ore, although thinner connecting cross-veins are generally sub-economic. The fissure veins tend to be larger, thicker, and host the higher gold grades. The most conspicuous alteration mineral is bright green, chrome-bearing phyllosilicate that occurs in basaltic and ultramafic host rocks, composed of fuchsite, mariposite or Cr-illite.*

*Most veins are 0.9 to 1.5 metres wide - ranging up to 6 metres in a few places, and are composed of quartz with minor carbonates, talc, mica, sulphides, scheelite and native gold. The quartz is milky white and usually banded with numerous partings and septa of grey wallrock included in the veins (Church and Jones, 1999).*

*Veins are dominantly composed of quartz, with minor carbonate minerals, mainly calcite and ankerite, and lesser amounts of chlorite, sericite, clay altered mariposite, talc, scheelite and native gold. Sulphides are present and, although locally abundant, make up less than 1 % of total vein volume. Pyrite and arsenopyrite are the most abundant sulphides with lesser marcasite, pyrrhotite, sphalerite, stibnite, galena, chalcopyrite and rare tetrahedrite. In the historic mining operations, approximately 35% of the productive veins were ore grade above a 4.7 Aug/t cutoff.*

**Mineralization: Property Area (cont'd)****Bralorne producer (cont'd)****Mineralization (from Beacon Hill Consultants, 2012) (cont'd)**

Three types of veins are recognized on the property; fissure, tension and cross veins. Fissure veins are the richest and most continuous in the camp and include the 51, 55 and 77 veins at Bralorne, the Main Vein at Pioneer and the Peter Vein. They have been traced continuously for up to 1500 metres along a 110° to 145° strike and to a depth of 1800 metres down a steep northerly dip. The fissure veins are commonly ribbon-banded. They have an average width of 1 to 1.5 metres but often pinch and swell, ranging from centimetres to seven metres in width. Tension veins are generally less continuous than the fissure veins with maximum strike lengths of 500 metres and similar dip extensions. They are characterized by massive white quartz with erratic high gold values, open-spaced filling textures, commonly including pockets of drusy to cockscomb quartz between widely spaced and slickensided septae. They are usually not as rich as fissure veins and are hosted in fault sets that strike roughly 70° and dip about 75° northwest. These tension veins form oblique splays off of the fissure veins. They include the 75 and 83 veins at Bralorne and the 27 vein at Pioneer. Cross veins are sub economic and are interpreted to be connecting structures between the fissure and tension veins (Ash, 2001).

The historic King, Bralorne and Pioneer mines all lay within the current Bralorne-Pioneer property (Figure 7-5). These mines developed a total of 30 veins through a number of shafts and 80 kilometers of tunnels on 44 levels, the deepest of which traced the 77 vein to a depth of 1900 meters (Church and Jones, 1999). The areas between these mines were not controlled by the main producing companies at the time the mines were operated, so these gap areas were never developed. Since the mine workings extend to the limits of the old claim boundaries, it is reasonable to expect mineralization to occur in the gap areas, with the same potential frequency of gold mineralization as that found in the mined areas. The current company controls the mineral claims covering these gap areas and has realized success so far in exploring these areas.

**PIONEER** past producer (Au-quartz veins)

MINFILE 092JNE004

Two kilometres west

The Pioneer veins are composed of mainly quartz gangue with fractures filled with calcite and ankerite. Small shoots of scheelite occur in the main vein and tourmaline is said to occur in cavities in the 27 vein. The quartz ribbons separate streaks containing chlorite, sericite, mariposite, gouge sulphides and gold. The principal sulphides, arsenopyrite and pyrite, occur as disseminations in massive quartz or in the ribbon partings. Massive arsenopyrite is often associated with free gold. Other sulphides include sphalerite, galena, chalcopryrite, pyrrhotite, marcasite and stibnite. Wallrocks are intensely altered and contain quartz, sericite, mariposite, kaolin, alunite, calcite and arsenopyrite. Low grades of gold are sometimes found in the wallrocks.

An assay was reported as 24 grams per tonne gold at the 25 level (600 metre long drift, average over 412 metres by 15 metres width) (Property File - Report by J.S. Stevenson, 1947).

**CORONATION** past producer (Au quartz veins)

MINFILE 092JNE007

Seven kilometres west

The north dipping vein averages 1.1 metres in width and is well ribboned. It contains quartz, calcite, sericite, ankerite, mariposite and "patchy" scheelite. Sulphide minerals include arsenopyrite, pyrite, minor sphalerite, pyrrhotite, chalcopryrite and occasional stibnite, galena and molybdenite. Gold is closely associated with arsenopyrite. The vein has a vertical continuity of 1500 metres. At lower levels, it averages 38.4 grams per tonne across 2 metres width for 160 metres; the probable (geological) reserve is 80,723 tonnes (Property File - Campbell, 1973). The 77 vein was the most prolific of the Bralorne veins and produced 1,904,700 tonnes of ore up until the mine closed in 1971.

**Mineralization: Property Area (cont'd)****HOLLAND** prospect (Au quartz veins)

MINFILE 092JNE008

500 metres west

*The veins contain sparse sulphides and talc and the wall rocks are heavily charged with pyrite. The best recent grab sample, taken in 1986 from the Holland adit, assayed 1.54 grams gold per tonne (Assessment Report 15415). This sample is in contrast to an earlier sample assaying 5.14 grams gold per tonne across 0.6 meter, taken by Cairnes in the same adit in 1935 (Geological Survey of Canada Memoir 213).*

**Mineralization: Property Area (cont'd)****PIONEER EXTENSION** developed prospect (Au quartz veins)

MINFILE 092JNE009

600 metres south

*The downdip extension of the most significant veins was tested by diamond-drill hole P85-02 in 1985 and intersected 2 quartz veins, 1.0 meter and 1.5 metre wide. Assays ranged from trace to 2.74 grams per tonne gold (Assessment Report 15730).*

*The veins consist of white quartz with small amounts of sericite, chlorite, ankerite, calcite, very minor pyrite and arsenopyrite and rare free gold.*

**WATERLOO** prospect (Au-quartz veins)

MINFILE 092JNE019

Three kilometres north

*The main workings (adit and opencuts) have explored a 1.3-metre quartz vein following a shear in brecciated andesite, trending northeast and dipping north. The centre of the vein is limey and contains disseminated arsenopyrite and sphalerite enveloped by arsenopyrite, sphalerite, pyrite and bornite on the vein edges. Assay values over 1.3 metres average 10 grams per tonne gold, 12.7 grams per tonne silver, and graded as high as 11 grams per tonne gold and 45.4 grams per tonne silver over 10 centimetres (Assessment Report 13323).*

*Southwest of the main showing (on the same ridge), three 10 to 15-centimetre veins are reported 3 metres apart. They show "epithermal" characteristics having cockscomb, semi-massive stibnite and boulangerite in chalcedony and stibiconite. Trace gold and silver values are reported with up to 8 per cent antimony.*

**COMSTOCK** prospect (Au quartz veins)

MINFILE 092HNE103

Three kilometres northwest

*The 1.2-metre vein strikes west-northwest with a steep north dip and is composed of 15-centimetre bands of quartz on either wall enclosing a calcareous infilling. Abundant pyrite with lesser amounts of arsenopyrite form a banded structure. Surface assays yield 0.68 grams per tonne gold and deeper samples gave 12.34 grams per tonne gold (Geological Survey of Canada Memoir 213, page 101). The vein was explored by a 10 metre shaft.*

**CADWALLADER CREEK** showing (Vein, Massive; Ultramafic-hosted talc magnesite)

MINFILE 092HNE113

One kilometer west

*In the Pioneer Extension workings, a shaft cuts through 30 metres of highly talcose rock lying beneath an albitic dyke. Nodules of Bridge River chert and argillite are found within the talc bed. It has been suggested that this particular showing of talc may not be derived from serpentinite but directly from the metasediments. Magnesium, necessary for this transformation, could have been supplied from the nearby Bralorne gabbros and diorites or from late solutions emanating from the ultramafic bodies themselves. Analysis of the talc in 1937 yielded the following results (in per cent) (Geological Survey of Canada Memoir 213, page 71):*

**Mineralization: Property Area (cont'd)****CADWALLADER CREEK showing (cont'd)**


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Silica	58.40
Ferric Iron (+ minor alumina)	8.07
Magnesia	29.66
Water (by difference)	3.87

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**COSMOPOLITAN developed prospect (Au-quartz veins)**

MINFILE 092HNE164

Five kilometers northwest

The Peter vein was drifted along a strike length of 35 metres on the 800 level, 305 metres below the surface (see Bralorne, 092JNE001).

About 1814 tonnes of ore were extracted from surface on this zone late in 1996 with grades of 3.4 to 10.2 grams per tonne gold. Included in this material is unknown tonnage of sulphide enriched quartz vein material assaying 572.4 grams per tonne gold with silver values of 1371 grams per tonne. This material plus 2267 tonnes stockpiled will be used as mill feed when the Bralorne mill starts up (George Cross News Letter No.28, February 10, 1997).

The parallel Millchuk vein, 300 metres to the north, has been traced by trenching for 670 metres, with the best chip sample grading 10.29 grams per tonne gold over 1.5 metres (George Cross News Letter No.111, 1991).

Two veins on the Loco prospect are estimated to contain 362,800 tonnes grading 17.2 grams per tonne gold (Information Circular 1995-1, page 15).

**STRUCTURAL ANALYSIS**

The Structural Analysis was accomplished marking the observed lineaments on a Hillside Shade map Tenure 600429. A total of 74 lineaments were indicated as shown on Figure 11. A Georient 32v9 software program was used to create a Rose Diagram reflecting the grouping of the 74 lineaments into an individual 10 °class sector angle interval as shown on Figure 12.

*Figure 11 Indicated Lineaments on Tenure 600429*  
(Base map: MapPlace & Google)

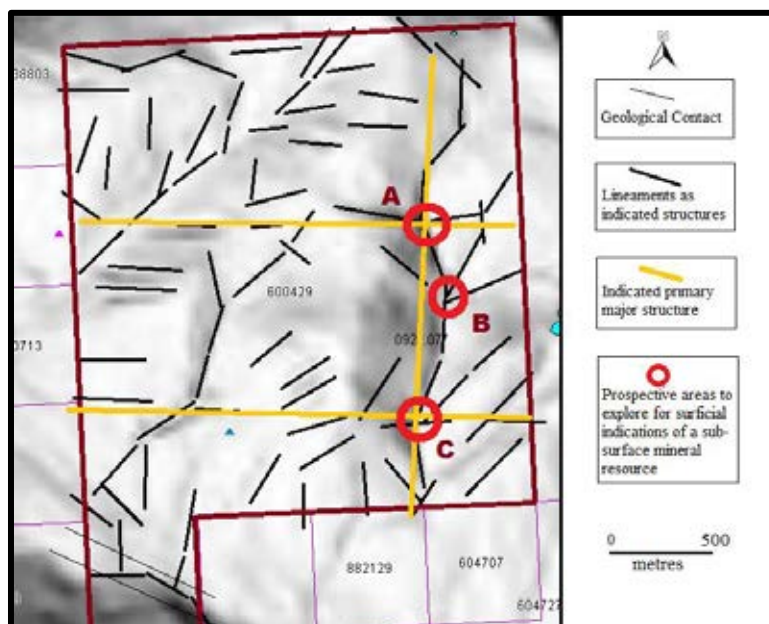
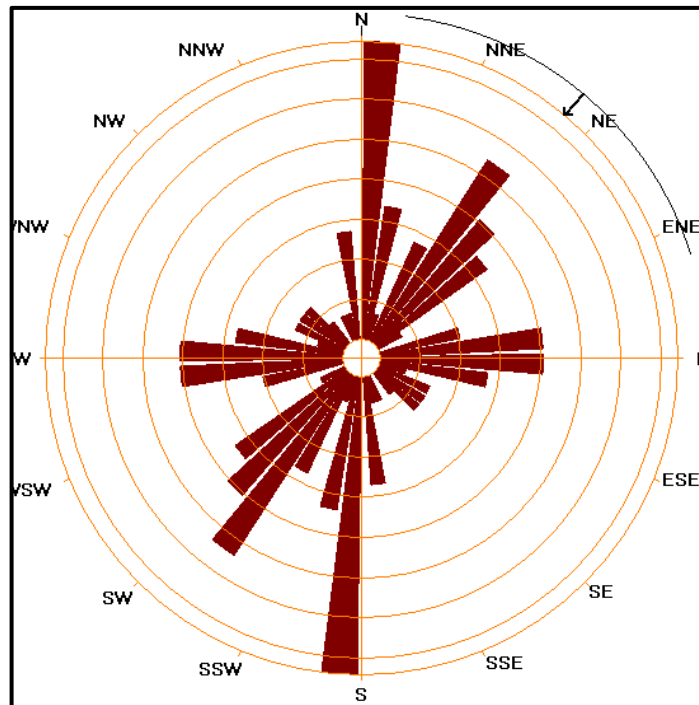


Table 2. **Approximate location of Figure 11 cross-structures**  
 (UTM-NAD 83)

Area	UTM East	UTM North	Elevation (metres)
A	517,575	5,624,150	2,060
B	517,670	5,623,780	1,916
C	517,550	5,623,350	1,740

Figure 12. **Rose Diagram from Lineaments of Tenure 600429**



**STATISTICS** (for Figure 12)

*Axial (non-polar) data*

*No. of Data = 74*

*Sector angle = 8°*

*Scale: tick interval = 2% [1.5 data]*

*Maximum = 14.9% [11 data]*

*Mean Resultant dir'n = 040-220*

*[Approx. 95% Confidence interval = ±32.6°]*

*(valid only for unimodal data)*

*Mean Resultant dir'n = 040.0 - 220.0*

*Circ. Median = 036.0 - 216.0*

*Circ. Mean Dev. about median = 35.0°*

*Circ. Variance = 0.28*

*Circular Std.Dev. = 46.86°*

*Circ. Dispersion = 5.60*

*Circ. Std Error = 0.275*

*Circ. Skewness = -1.45*

*Circ. Kurtosis = -4.08*

*kappa = 0.54*

*(von Mises concentration param. estimate)*

*Resultant length = 19.42*

*Mean Resultant length = 0.2624*

*'Mean' Moments: Cbar = 0.0456; Sbar = 0.2584*

*'Full' trig. sums: SumCos = 3.3763; Sbar = 19.1226*

*Mean resultant of doubled angles = 0.2293*

*Mean direction of doubled angles = 026*

*(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'*

**STRUCTURAL ANALYSIS** (cont'd)Table 3. **Summary of Minfile properties included in report**

<i>Property</i>	<i>Geology</i>	<i>Structure</i>	<i>Mineralization</i>
<b>Bralorne</b> (producer) MINFILE 092JNE001	<i>Principal host rock is a diorite of the Bralorne Igneous Complex</i>	<i>Main producing veins generally strike east and dip north</i>	<i>Veins are tabular, well-ribbed or partly ribbed, and partly massive or brecciated; best gold values from ribbed veins</i>
<b>Pioneer</b> (past producer) MINFILE 092JNE004	<i>Greenstone of Cadwallader Group and in soda granite</i>	<i>Main vein strikes 280 to 285 degrees ad dips north. Strike length of 1140 metres.</i>	<i>Ribbed quartz with arsenopyrite and pyrite as disseminations in massive quartz or in the ribbon partings</i>
<b>Coronation</b> (past producer) MINFILE 092JNE007	<i>The 77 vein, the most prolific of the Bralorne veins, is hosted in diorite of the Bralorne Igneous Complex</i>	<i>77 vein has a 1,500 metre vertical continuity. East trending to southeast structure.</i>	<i>Well ribbed vein with gold closely associated with arsenopyrite tonne gold at lower levels.</i>
<b>Holland</b> (prospect) MINFILE 092JNE008	<i>Meta-sediments of the Bridge River Complex</i>	<i>East trending structure</i>	<i>Sparse sulphides. Best recent grab sample assayed 1.54 grams per tonne gold.</i>
<b>Pioneer Extension</b> (developed prospect) MINFILE 092JNE009	<i>Greenstones and crystalline plutonic rocks</i>	<i>Northwest and northeast striking banded discontinuous quartz veins. Main vein strikes east and dips shallowly north.</i>	<i>Assays from quartz veins intersected in diamond drill holes ranged from trace to 2.74 grams per tonne gold.</i>
<b>Waterloo</b> (prospect) MINFILE 092JNE019	<i>Mississippian andesites,, cherts, and quartzites Bralorne Igneous Complex except serpentinite;</i>	<i>1.3 metre quartz vein follows a shear in brecciated andesite; NE strike /N dip</i>	<i>Main quartz vein: disseminated arsenopyrite and sphalerite w/assays over 1.3 metres averaging 10 g/t Au. Other veins show epithermal characteristics w/ trace Au &amp; Ag values &amp; up to 8% antimony</i>

**STRUCTURAL ANALYSIS (cont'd)***Table 3. Summary of Minfile properties included in report (cont'd)*

<b>Comstock</b> (prospect) MINFILE 092HNE103	<i>Volcanics &amp; sediments of the Bridge River Complex</i>	<i>Banded quartz vein striking WNW w/ steep dip is in mostly green- stones and extends into argillites a few hundred metres to the east.</i>	<i>1.5 metre quartz vein with calcareous centre. Abundant pyrite and lesser arsenopyrite form a banded structure. Gold assays of 0.68 g at surface and 12.34 g from 10 metre shaft.</i>
<b>Cadwallader Creek</b> (showing) MINFILE 092HNE113	<i>Sediments of the Bridge River Complex</i>	<i>Talc showing w/ equal ankerite; disseminated sulphides</i>	<i>58.4 % silica &amp; 29.66 % magnesia.</i>
<b>Cosmopolitan</b> (developed prospect) MINFILE 092HNE164	<i>Area of Peter Vein underlain by Bridge River Complex and Cadwallader Group sediments and volcanics; transected by the Cadwallader Break</i>	<i>35 metre drift on the Peter Vein on the 800 level 305 metres below the surface</i>	<i>Grades of 3.4 to 10.2 g/t Au extracted from surface including vein material assaying 572.4 g/t Au and 1371 g/t Ag</i>

**INTERPRETATION and CONCLUSIONS**

Three cross-structural locations that are associated with an indicated primary S1 major northerly trending structure on Tenure 600429 of the Gold 600429 Claim Group have been determined. All three are associated with a northerly primary structure which has been offset by secondary structures as shown in the configuration of the watercourse depression. Two of the cross structures, A & C, are associated with east-west structures which appear as possible primary S1 or secondary S2 structures and are indicated to cross the entire width of the subject claim. One cross structure, B, appears as a four structure intersection located within the confines of the prime northerly structure which is indicated to be offset 100 metres to the east by the block faulting of the two east-west structures.

If a comparison is to be made of structures on Tenure 600429 and the structures at the Bralorne Mine, the structures are comparable in that the Bralorne fault system is a composite of extensive splays and cross faults, however, the preferred direction for mineralized veins is east-west. The Bralorne mineral deposit control is unclear as it is reported to be in part controlled by a flexure in the Bralorne fault system (Figure 9) and is indicated by the MapPlace Geology map (Figure 10) that the Bralorne is at or near the intersection of the major Cadwallader fault structure and a northerly trending fault. Both scenarios, however, are ideal situations for developing the conditions for tapping deep seated hydrothermal mineral solutions and accommodating the mineralization in a structurally prepared host.

On Tenure 600429, although there is no indication of a major structure such as the Cadwallader or the Ferguson faults, there are the three structural intersection locations that could provide valuable surficial geological information as to the potential for a structurally controlled underlying mineral resource.



**INTERPRETATION and CONCLUSIONS (cont'd)**

The first positive indication for this is that each one of the two east-west structures host Minfile reported mineralization on a neighboring property. Approximately 1,600 metres west of structural intersection A is the Cadwallader Creek mineral showing which may be located on a common east-west structure.

Approximately 500 metres west of structural intersection C is the Holland mineral prospect which may be located on a common east-west structure and which is reported to contain sparse sulphides assaying 1.54 grams per tonne gold from a grab sample taken from an east trending structure at the Holland adit.

Thus the east-west structures hosting the mineralization in the west may be the surficial indication of a deep-seated mineral resource whereby mineralizing fluids reached the surface via the shear zone. The structural intersection location would be the most favourable route for the transit of these fluids to or near the surface where any degree of geological indicators would be etched.

**RECOMMENDATIONS**

1. Localized VLF-EM, magnetometer, and geochemical surveys over each of the three structural intersection areas marked A, B, and C on Figure 11.
2. The surveys would be completed on a 750 by 750 grid oriented at 045 degrees and centred on the approximate UTM coordinate as stated within Table 2. The grid lines should be spaced at 50 metre intervals with samples and readings taken at 25 metre intervals along the 16 grid lines.
3. In the soil sampling, the soil samples should be packaged and analyzed separately for each of the three localities. Soil sample quality should be noted if differing from the norm. (e.g. humus, silt, etc.)
4. In the magnetometer survey, only one and the same magnetometer should be used in the survey and if possible, each location should be started and completed on the same day.
5. In the survey procedure, all information on the topography and topographical features should be recorded. This information is to include slope angles, depressions, water courses and direction, outcrops (a rock sample should be taken with marked coordinates, and submitted to a geologist for description prior to analysis).

Respectfully submitted

***Sookochoff Consultants Inc.***



***Laurence Sookochoff, PEng***

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[www.cayoosh.net/bralorne.html](http://www.cayoosh.net/bralorne.html)

**Beacon Hill Consultants** – Preliminary Economic Assessment on the Bralorne Gold Mines Property for Bralorne Gold Mines Inc. November 20, 2012.

**MapPlace** – Map Data downloads

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

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**Parsons, M.B.** et.al. – Baseline geochemistry and controls on mine drainage composition in the Bridge River Mining District, British Columbia. Geological Survey of Canada Open File 6435. 2013

**Sookchoff, L.** – Exploration Progress Report on the Reliance Property for Menika Mining Ltd. July 15, 1985. *AR 14,019*.

**Sookchoff, L.** – Geological Assessment Report on the Gold 642303 Claim Group for BCT Mining Corp. May 23, 2013.

*AR 15,415*

**STATEMENT OF COSTS**

Work on Tenure 600429 of the Gold 600429 Claim Group was done from March 19, 2013 to March 23, 2013 to the value as follows:

*Structural Analysis*

<i>Laurence Sookochoff, PEng. 2 1/2 days @ \$ 1,000.00/day</i>	----- --	\$ 2,500.00
<i>Maps</i>	----- --	700.00
<i>Report</i>	----- --	<u>4,200.00</u>
		\$ 7,400.00
		=====

**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 forty-six 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 periodic mineral exploration work the author has performed in the Goldbridge area since 1985.
- 5) I have no interest in the Property as described herein.



***Laurence Sookochoff, P. Eng.***