ASSESSEMENT REPORT ON THE GEOLOGY & MINERAL POTENTIAL OF THE CLY 1 & 2 CLAIMS (including the Bunker Hill & Mormon Girl Crown Grants), southeastern British Columbia, Canada (NTS 082F03)

For KOOTENAY GOLD CORP.,

By

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CONFIDENTIAL

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(1) SUMMARY

The author spent a total of 9 days in the field (18-19th October 2003 and 10-16th June 2004) mapping and examining Au-bearing quartz veins and W-Au skarns on parts of the "Bunker Hill Property" which lies in southeastern BC. The field work mainly involved 1:5000 scale geological mapping (Map 1), although an area of higher economic interest stretching 1000 meters along the western margin of a granite body was mapped at 1:2000 scale (Map 2). Thick forest cover in some areas hindered accurate GPS readings which caused location problems during the more detailed mapping.

The property comprises the CLY 1 and 2 claims, as well as the Bunker Hill and Mormon Girl Crown Grants (L2939 and L1949). Mineralization on the property include the old Bunker Hill gold mine (BC MINFILE 082FSW002), as well as several Au, Pb or W showings including the Ness, Hand Steel, Blue Vein and Lefevre skarn occurrences.

While the author was on the property, Mr. Craig Kennedy was also employed by Kootenay Gold Corp., to prospect the claims area. No samples for assay were collected by the author, and the data presented in this report (including those listed in Appendices A and B) is derived from sampling work by prospectors Craig and Tom Kennedy, as well as internal property reports previously submitted for assessment by Howard (2000).

The **Bunker Hill** property is located approximately 16 km southwest of the town of Salmo and 6 km north of the Canada-US border. It lies in map sheet NTS 082F03 W1/2, close to UTM (NAD 83) 471485E – 5434285N (Fig. 1). It comprises two Crown Granted claims (Bunker Hill, L2939 and Mormon Girl, L1949; Table 1B), as well as two modified grid claims CLY 1, CLY 2 (tenure 370177, 370178,). The latter two modified claims total 40 units (Table 1A) and they are held in good standing until the 30th June 2004 (Table 1A). The entire package covers approximately 10 square kilometers and measures approximately 4 km in length from east to west and 2.5 km from north to south (Fig. 2). The claims and Crown Grants are 100 % owned by Mr. William R. Howard.

The Bunker Hill property can be accessed by taking the Number 6 highway south from Salmo to the US border point at Nelway. From Nelway there is a gravel road that runs westward along the northern bank of the Pend-D'Oreille River (Photo 1). Approximately 10 km west of Nelway at UTM (NAD 83) 470705E – 5431840N this road is joined by the Limpid Creek Forest Services road which heads northward to the property. The claims are serviced by a network of minor roads, including several constructed by the BC Hydro Power Company (Photo 1). The area is generally forested, of moderate to steep hill relief and ranges from 600 to 1700 metres above sea level.

Geologically, the Bunker Hill property is located within the Omineca Belt and Kootenay Terrane of southeastern BC. It is largely underlain by a steeply to moderately dipping package of meta-sediments that probably belongs to the Cambrian-age Laib Formation. This formation represents distal shelf sediments that were deposited in a relatively reduced environment. Although most of the Laib Formation rocks in the Salmo district

strike NE-SW, in the Bunker Hill area they strike mainly north to NNE and dip mostly east to ESE. The main sedimentary lithologies include micaceous quartzites (Photos 2 and 3) and phyllitic to schistose argillites (Photo 4); some of the later are organic-rich. Also present are at least two thin (< 100 m) organic-rich limestone units (Photos 5 and 6), one of which is traceable along strike for 800 meters. Many of the meta-sediments possess a thin layering that probably represents transposed bedding. The layering lies sub parallel to a variably developed S1 cleavage-schistosity, and many of the more argillaceous rocks have pronounced phyllitic fabrics.

The largest and most economically important intrusion on the Bunker Hill Property is a narrow north trending dike-like granite body (Photo 7) that intrudes the east-dipping and NNE striking Laib Formation supracrustal rocks. The elongate body is at least 1.2 km-long and 200 to 400 meters wide, and it is believed to have followed an old structure that obliquely cut the metasediments. The dike probably represents a southern extension of the Cretaceous-age Bunker Hill Stock which has a maximum dimension of 1.5 km by 1.5 km. The stock may represent a satellite intrusion to the much larger Wallack Creek Stock which lies approximately 2 km further east. Most of the known mineralization on the claims is hosted by Laib Formation metasediments, and it mainly lies less than 400 meters west of the contact between the formation and the elongate granite body.

In addition to brittle faulting and shearing, the Laib Formation rocks have undergone greenschist facies metaphorphism and were deformed by two episodes of pre-Cretaceous folding. The first (F1) ductile phase resulted in the property-wide S1 phyllitic and schistose planar fabrics that lie parallel to the transposed bedding layers. The second, less intense F2 episode caused open to moderately tight folding of the S1 fabrics and layering (Photo 2).

The Bunker Hill Stock probably belongs to the same suite responsible for the W skarns and Au-bearing quartz-sulphide mineralization at the Emerald-Tungsten mining camp, located 13 km further ENE. The stock, which post-dates the regional deformation, in rare cases contains tourmaline. The Laib Formation metasediments adjacent to the stock are variably overprinted by a biotite hornfels that may locally grade into fine grained “reaction-type” skarn or skarnoid containing pyroxene-garnet assemblages. However, in the vicinity of the Lefevre trenches, there is “infiltration-type” skarn present which resulted from W-Au-bearing hydrothermal fluids.

The Bunker Hill and Mormon Girl claims were Crown Granted in 1889. The Au-bearing quartz veins exposed close to UTM 471485E – 5434285N were worked from three adits at the Bunker Hill mine; these adits are now collapsed. Recorded production from the mine between 1933 to 1942 totaled 3,298 grams gold from 340 tonnes, averaging 9.7 g/t (BC MINFILE 082FSW002). In addition, 9642 grams of silver were obtained from the mine.

Three types of mineralization are recognized on the Bunker Hill property and these are probably all related genetically to the Cretaceous granite. These types are as follows:

Type 1: W-bearing scheelite-garnet-pyroxene exoskarns that lie immediately adjacent to the granites western margin; this mineralization is best exposed in the Lefevre trenches and pits at UTM 471610E – 5434135N (Photo 8; Fig. 4A). This 30 m by 100 m long skarn, particularly where exposed in the southernmost pits and trenches, is overprinted by the Type 2 Au-bearing quartz-sulphide stringer mineralization. Mineralization exposed in the pits was recently sampled by Tom and Craig Kennedy (Appendix B; Figs. 3 and 4. Many samples are enhanced in Au, with values up to 36274 ppb (Appendices A and B). In addition, the rocks were enhanced in Ag, Co, As, Bi and W. None of these rocks were analyzed for Se or Te, but some other samples collected elsewhere on the property were enriched in these elements (Appendix A).

Type 2: Au-bearing quartz veins and stringer zones containing pyrite with sporadic trace galena, sphalerite and tellurides. One set was worked at the old Bunker Hill Mine Photos 9 to 13), although there are several other veins east and northeast of the mine that have only been trench and sampled, including the "Blue" and "Moly" veins (Photos 14 and 15). The sulphide and quartz stringer mineralization that overprints the skarn at the Lefevre trenches also belongs to this type. The larger veins exceed 1.3 meters thick and exceed 40 meters in length, and they occur up to 200 meters from the granite-metasediment contact. In most cases the veins are hosted by Laib metasedimentary quartzites and argillites, but in a few cases (e.g. in the Blue Vein and Moly Trench vicinities; Photos 14 and 15) they pass eastwards into the granite body, although they then quickly die out. The veins at the Bunker Hill Mine include minor sericite and calcite as well as abundant coarse-grained pyrite with lesser pyrrhotite and minor to trace amounts of arsenopyrite, galena and sphalerite. Warren and Cummings (1937) found some unidentifiable Bi, Pb and Te-bearing minerals that may include galenobismuthinite, as well as Au tellurides. The character and chemistry of this Au mineralization shows similarities to the Au-As-Bi-Te-rich mineralization that is spatially associated with the W skarns in the Emerald-Tungsten camp, located about 13 km further ENE. It also has strong analogies in its age, spatial relationships and chemistry, to the Cretaceous mineralization at the Fort Knox camp in the Fairbanks mining district of Alaska.

Type 3: pyrite-galena ± sphalerite mineralization hosted by sedimentary country rocks as typified by the "Hand Steel" occurrence which lies 500 meters west of the granite margin. This more distal style of mineralization tends to lack distinct quartz veining but instead comprises sparse sulphides (pyrite, galena, sphalerite) disseminated in altered and bleached argillaceous quartzites.

The main controls of mineralization on the property are:

(1) Proximity to the margins of the elongate granite body (particularly the western margin).
(2) The presence of limey metasediments immediately adjacent to the granite for the development of the skarns, as noted in the Lefevre Trenches.

(3) The presence of both N-S and E-W structures, which have controlled the veins. The N-S structures have followed either the granite margin or the bedding-schistosity in the metasediments. The origin of the controlling E-W structures is uncertain. It is noteworthy that the Bunker Hill Mine, the Blue Steel, Moly, Kenneth Trench and Ness all lie on an E-W trend which is also the orientation of the creek draining the mine area. It is likely that a series of E-W faults cut the area, and they may also have caused minor left lateral displacement of the granite margin.

A mineral and metal zoning exists on the property. Type 1 W-Au-bearing garnet-pyroxene calcic exoskarns such as those exposed in the Lefevre trenches are the most proximal, lying immediately adjacent to the western margin of the elongate granite body. The Type 2 Au-bearing quartz veins can also be highly proximal, and some in the Blue Vein and Moly Trench areas actually pass from the metasediments into the granite body. However, other veins, such as those at the old Bunker Hill Mine, are more distally developed up to 200 meters from the granite. The most distal style of mineralization on the property is represented by Type 3 disseminated Pb-Zn-Ag mineralization as seen at the Hand Steel, which lies about 500 meters west of the granite margin.

Binary plots (Fig. 5) using the assay data collected from Bunker Hill property show that Au has a very good positive correlation with Bi and moderately good correlations with Ag, As, Mo and Pb. An excellent correlation between Pb:Ag is also noted and a weak to moderate correlation exists between Cu:Ag and Cu:Au. No correlation is seen between Au:Zn, Au:W, Au:Ba, Au:Cr, Au:Ni or Au:Co.

The Bunker Hill property has good exploration potential for the discovery of a small, high grade, vein-hosted gold deposit, and further exploration for this style of mineralization should continue. Recommended work would include:

1. Map the southern extension of the elongate granitic body and prospect its margins (particularly along the western contact).
2. Drive a 500 meter-long spur road westwards towards the Blue Vein-Lefevre Trenches from the existing upper and eastern road. This should be constructed to pass over the Kenneth and Lefevre Trenches and the Blue Vein area, and may hopefully provide more exposure.
3. Prospect for skarn in the area where the northern limestone horizon intersects the western margin of the granite (Map 1)
4. Using the Fort Knox Alaska model as an exploration guide, reconnaissance prospecting outside claims could be conducted in the area between the Bunker Hill Stock in the west and the Wallack Creek Stock to the east.

(2) INTRODUCTION AND TERMS OF REFERENCE:

Mr. Jim MacDonald, President of Kootenay Gold Corp., commissioned the author to write this report. The report is designed as an assessment document to outline the geology, mineral potential and a review of the data obtained by reconnaissance geochemical sampling and prospecting on the **Bunker Hill** property. No mineral resource estimates are made or inferred by this report.

The report is based on an extensive review and compilation of private corporate reports, documents and geochemical assay data as well as on the publicly available geological and scientific papers, and the BC MINFILE. These references are cited in the bibliography which accompanies this report.

The author spent a total of 9 field days visiting the property (excluding travel time), mapping the geology and distribution of the mineral occurrences within a 3.5 km^2 area; mapping was undertaken at 1:5000 and 1:2000 scale (Maps 1 and 2).

No samples for assay were collected by the author from any of the properties; the geochemical assay data included in the report (*see* Appendices A and B) were obtained from samples collected by either Tom or Craig Kennedy, who were employed by Kootenay Gold Corp. It should be noted that unless otherwise stated, all UTM locations in this report are using the North American Datum 1983 (NAD 83).

(3) DISCLAIMER.

The author (G.E. Ray) spent nine days (18 – 19th October 2003 and 10-16th June 2004) geologically mapping the Bunker Hill property, as well as examining the mineral occurrences, including the defunct Bunker Hill gold mine (BC MINFILE 082FSW002). This report is based largely on field observations made by the author as well as on conversations with prospectors Craig and Tom Kennedy and geologists Trygve Hoy and William Howard. Data has also been included from published and unpublished papers, maps and geochemical data (e.g. Fyles and Hewlett, 1959; Wehrle, 1998; Howard, 2000, 2003; Hoy and Dunne, 2001).

It should be noted that the author had **no** role in either the planning or running the previous exploration or geochemical sampling programs done on the Kootenay Gold Corp., property described in this report.

(4) PROPERTY DESCRIPTION AND LOCATION

The Bunker Hill Property is located in the Nelson Mining Division of southeastern British Columbia, NTS 082F03 W1/2, close to UTM (NAD 83) 471485E – 5434285N (Fig. 1). It lies approximately 16 km southwest of the town of Salmo and 6 km north of the Canada-US border. The property comprises two Crown Granted claims (Bunker Hill, L2939 and Mormon Girl, L1949), and two modified grid claims CLY 1, CLY 2 (tenure 370177, 370178) comprising 40 claim units (Table 1A and 1B).The claims and Crown Grants are 100 % owned by William R. Howard.

Table 1A: Details on the tenure of claims held by Kootenay Gold Corp. in the Bunker Hill area, southeast BC (data from BC MapPlace).

Tenure number	Claim name	Owner number	Map number	Work recorded to	Status	Area (units)	Tag number
370177	CLY 1	112341	082F004	2004.06.30	Good Standing 2004.06.30	20	232582
370178	CLY 2	112341	082F004	2004.06.30	Good Standing 2004.06.30	20	232578

Table 1B: Details on the tenure of Crown Grants held by Kootenay Gold Corp. in the Bunker Hill area, southeast BC (data from BC MapPlace).

Lot name	Lot number	area (hectares)	NTS map	BCGS map	Land district
Bunker Hill	2939	12.08	082F03W	082F004	Kootenay
Mormon girl	1949	17.65	082F03W	082F004	Kootenay

Kootenay Gold Corp. had an option agreement with Howard to acquire a 100% interest in the property, but this was relinquished in late June 2004.

The property includes the former Bunker Hill gold mine (Fig. 2; BC MINFILE 082FSW002) which lies on Crown Grant L 2939. Between 1933 and 1942 three adits were driven (now collapsed) and the mine produced 3.3 kg of Au and 9.6 kg of Ag from 340 tonnes of ore (BC MINFILE). Mineralization is hosted by sulphide-bearing quartz veins that exceeded 1 m in width.

In addition to the Bunker Hill mine, the claims include several other Au, W, Cu and/or Zn-Pb occurrences, including those present at the “Blue Quartz Vein”, “Moly Vein”, “Kenneth Trench”, “Hand Steel” and “Lefevre Trenches” (Fig. 2; Maps 1 and 2). The latter trenches (Figs. 4A and 4B) are located 200 m SE of the old Bunker Hill mine where they expose scheelite-bearing skarn and Au-bearing quartz-sulphide mineralization. Another occurrence, the Ness Cu-Pb showing (BC MINFILE 082FSW233) lies approximately 500 m further east, but it was not visited by the author.

The claims are largely underlain by a folded and steeply dipping package of metasediments that include phyllitic argillites, micaceous quartzites, meta-siltstones and thin, extensive units of dirty limestone and marble (Maps 1 and 2). The package represents distal-shelf assembly sediments that were lain down on the western to northwestern margin of the ancestral North American continent. The precise age and grouping of the metasediments at Bunker Hill are uncertain but for this report they are considered to belong to the Cambrian-age Laib Formation as described by Little (1950), Fyles and Hewlett (1959) and Hoy and Dunne (2001).

(5) ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Bunker Hill property is located approximately 400 km east of Vancouver in the Nelson Mining Division of southeastern British Columbia, NTS 082F03 W1/2, close to UTM (NAD 83) 471485E – 5434285N (Fig. 1). It lies 16 km southwest of the town of Salmo and 6 km north of the Canada-US border in the southern Bonnington Mountains, North of the Pend d’Oreille River valley. Access to the property is gained by traveling south from Salmo on the paved Number 6 highway to the US border crossing at Nelway. From Nelway there is a gravel road that runs westward along the northern bank of the Pend-D’Oreille River. Approximately 10 km west of Nelway at UTM 470705E – 5431840N, this road is joined by the Limpid Creek Forest Services road which heads northward for about 7 km to the property. A BC Hydro Power line (Photo 1) and several minor roads cross the claims (Maps 1 and 2). Glacial drift and fluvial-alluvial deposits overlie much of the area. Rock exposure is scarce; some outcrops are found in the creeks, old road cuts and workings, as well as on some ridges and hilltops. Some good exposures are seen in the road cuts along the Limpid Creek Forest Service Road.

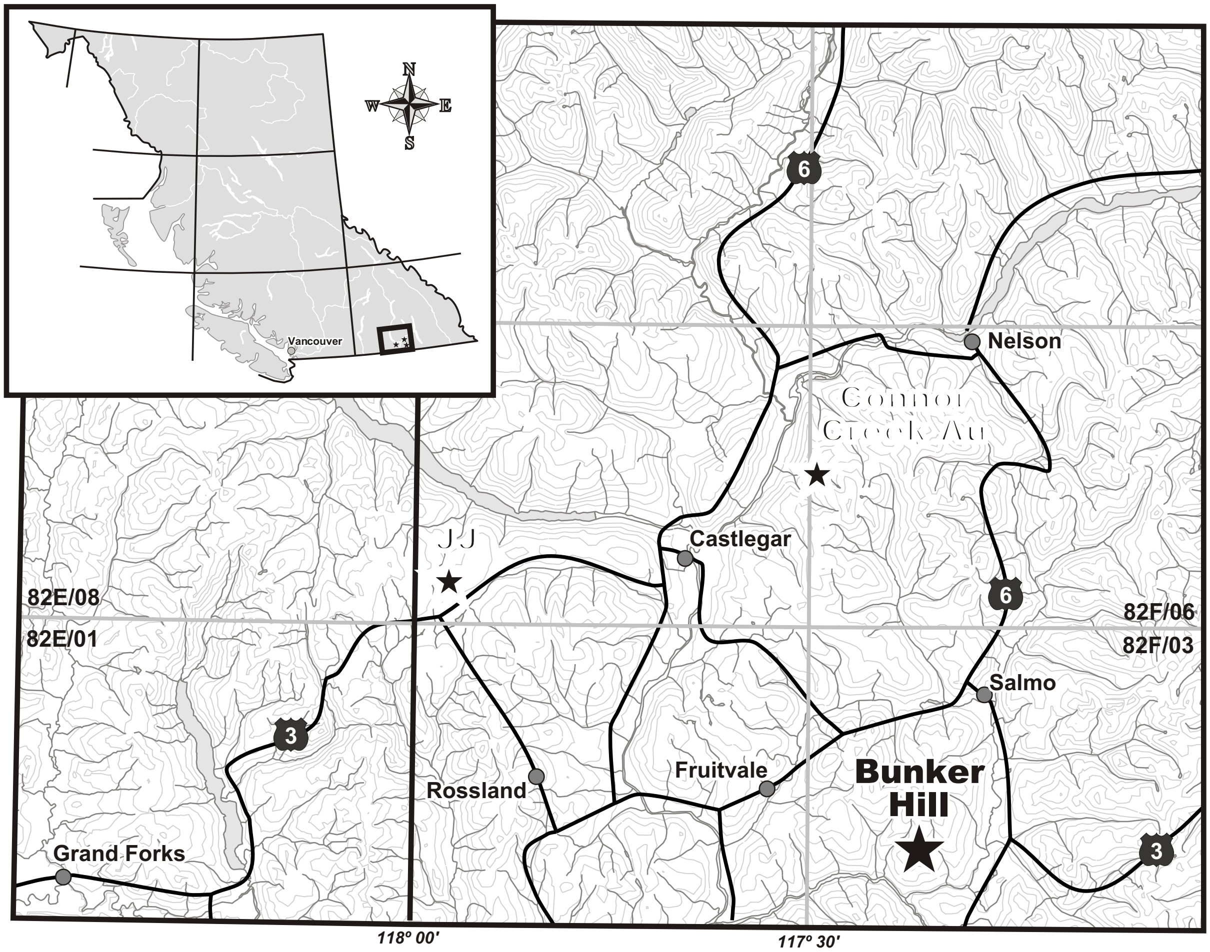

Fig. 1: Location of the Bunker Hill Au Property
in south-east BC

The terrain on the property is moderate to steep, and ranges in elevation from 600 - 1700 m. The vegetation includes Douglas fir, cedar, balsam, spruce, buckbrush, aspen and lodgepole pine. Numerous stands of poplar and birch occur along wet drainages. Recently, small areas have been clear-cut. The summers are often long, dry and hot with intervening short periods of rain. The winters generally last from November to April and are characterized by snowfalls and intervening bright, sunny periods.

(6) WORK HISTORY

The Bunker Hill and Mormon Girl claims were Crown Granted in 1889. The Au-bearing quartz veins exposed close to UTM 471485E – 5434285N were worked from three adits at the Bunker Hill mine; these adits are now collapsed. Bunker Hill Gold Mines Ltd., worked the property from 1933 to 1935 and thereafter Waneta Gold Mines Ltd., operated until 1941. Three underground diamond drill holes were collared from Adit No. 3 in 1936. (BC Minister of Mines Annual Report, 1936).

Recorded production from the Bunker Hill mine from 1933 to 1942 totaled 3,298 grams gold from 340 tonnes of ore or 9.7 g/t (106 oz. Au from 375 tons or 0.28 oz/ton) (BC Minfile 082FSW002). In addition, 9642 grams of silver were obtained from the mine. Detailed annual production from Bunker Hill, as reported by BC MINFILE, is as follows:

Year	Tonnes mined	Au (g)	Ag (g)
1933	45	249	4043
1934	83	1773	1244
1938	67	156	2426
1939	41	249	280
1940	66	591	1120
1942	38	280	529

An ore petrographic study of Au-bearing quartz-sulphide vein material, supplied by Waneta Gold Mines, Ltd., revealed the presence of gold tellurides and Pb-Bi minerals (Warren & Cummings, 1937). Later in 1942, scheelite-bearing skarns were discovered by Mr. H. Lefevre on the Mormon Girl Crown Grant about 200 m SE of the mine. A number of trenches and at least five blasted pits (Figs. 4A and 4B) expose this “Lefevre skarn” showing which was examined by Hedley (1943) and Little (1959). The trenches reveal the western margin of a granite body, the Bunker Hill Stock, as well as scheelite-bearing calcic exoskarns that contain some sulphide and quartz-rich Au mineralization.

Until 1959, the Bunker Hill area lay close to the northern limit of the geological mapping completed by the B.C. Department of Mines (Fyles and Hewlett, 1959). In 1965, Little compiled Fyles and Hewlett’s mapping with his own at 1:63,360 scale (Little, 1965). Kaufman (1984) and Harris (1984) surveyed five 150 m-spaced lines and collected soil samples at 30 m intervals; approximately 100 soil and 35 rock samples were assayed, but only for Au and W. Several rock and soil anomalies were noted, including rocks containing up to 1600 ppb Au and >2000 ppm W.

In 1988 Corona Corp., ran a single line of soil sampling (L 24E) partly over the Bunker Hill area (Gaunt, 1989; 1990), and completed some airborne geophysical work (Yee, 1989). Einarsen (1995) later presented the results of geologic mapping done southwest of the mine. Wehrle (1998) completed some prospecting and mapping on parts of the old Corona grid line where the Au soil anomalies coincided with the airborne geophysical anomalies described by Yee (1989). Wehrle (1998; 1999) laid out several rectilinear grids totaling 5.9 km in length around some of the old workings and completed a total field VLF-EM geophysical survey. Five previously undocumented old workings were found (Yankee Open Cut, Yankee Clear Cut Trench, Kenneth Trench, Hand Steel Trench and Timbered Shaft). In the Bunker Hill mine - Lefevre skarn grid area, 96 soil samples from 94 sites were analyzed for Au and 30 element ICP.

Between 1997 and 2003, Howard (2000, 2003) completed a considerable amount of fieldwork on the property. He discovered the ultramafic rocks, including serpentinites and pyroxenites, at UTM 471013E – 5434857N, close to the 9-1 / 9-2 Hydro Tower road. Howard (2000), using a model outlined by Ash et al. (1996) speculated that the Bunker Hill Au veins may be related to the ultramafic rocks. He also identified veins of black tourmaline (schorl) in some parts of the Bunker Hill stock, a feature that is common to many of the Cretaceous granites in the district (Fyles and Hewlett, 1959; Hoy and Dunne, 2001).

Ray and Webster (1998) suggested that the W skarns on the Bunker Hill property were similar to those in the Emerald-Tungsten mining camp which lies 13 km further ENE. Later, Lefebure et al. (1999) classed the Bunker Hill quartz veins as intrusion-related Au-W-Bi mineralization. The most recent work prior to the visit by the author to Bunker Hill was completed by Tom and Craig Kennedy who prospected the claims, panned some streams and collected a number of rock samples (Kennedy, 2003). The assay results are presented in Appendices A and B.

(7) DEPOSIT TYPES

The following three styles of mineralization are seen on the Bunker Hill property:

1. Garnet-pyroxene-scheelite-bearing W skarns together with Au-bearing quartz-sulphide veins and stringers as exposed at the Lefevre skarn showing. These are generally hosted by Laib Formation meta-calcareous rocks close to their contact with the Bunker Hill Stock.
2. Au-bearing quartz-sulphide veins as typified by those at the old Bunker Hill mine (BC MINFILE 082FSW002), as well as the veins present in the Blue Vein and Moly Trench areas, located 200 meters further NE. These are generally hosted by Laib Formation phyllites and quartzites, although at the Blue Vein and Moly Trench vicinities the veins pass eastwards for short distances into the granite (Map 2).

3. Pyrite-galena ± sphalerite mineralization hosted by sedimentary country rocks as typified by the "Hand Steel" occurrence which lies 500 meters west of the granite. This type may also be present at the Ness Cu-Pb showing (BC MINFILE 082FSW233), which the author tried to visit but could not find. At the Hand Steel, this mineralization tends to lack quartz veining and comprises sparse disseminated sulphides in altered and bleached argillaceous quartzites.

(8). ALTERATION

All the thermal and hydrothermal alteration seen on the property appears to be spatially and genetically related to the Bunker Hill Stock, and virtually all of this lies in the Laib package close to the western margin of the intrusion. By contrast, no significantly alteration was seen in the Laib rocks east of the granitic body. The following styles of thermal and/or hydrothermal alteration are present on the Bunker Hill claims:

(i) S**karnoid and hornfels:** These are typically very fine-grained, mineralogically simple, calc-silicate and silicate assemblages formed by thermal metamorphism without significant addition of outside components. Skarnoid typically forms from a limestone or shaly limestone precursor, whereas hornfels forms from argillite and argillitic quartzites. Hornfels and skarnoid are generally absent against thin dikes and sills but are locally developed in the thermal aureole around the Bunker Hill Stock, particularly in argillaceous quartzites and the rarer calcareous rocks along the stocks' western margin. In many skarn districts worldwide, the presence of early skarnoid and hornfels is thought to aid ground preparation for the later mineralizing events. Worldwide, hornfels mineralogy may be zoned with respect to the thermal center, commonly with pyroxenes proximal and biotite more distal.

(ii) Skarn: Coarse grained infiltration exoskarns related to the introduction of hydrothermal fluids are uncommon on the claims but are best seen in the vicinity of the Lefevre Trenches; no endoskarn (i.e. skarn that overprints the intrusive rocks) was seen on the claims. At the Lefevre trenches, the calcic exoskarns form coarse to medium grained rocks containing pale to medium brown colored garnet, green clinopyroxene, abundant quartz, and variable amounts of calcite, biotite, chlorite, secondary amphibole and Fe sulfides; the latter can locally exceed 10 percent and mostly comprises pyrite, although minor pyrrhotite was seen. Some of the skarns are interlayered with biotite ± pyroxene hornfels, and this layering probably reflects original sedimentary bedding.

Worldwide, many skarn-related hydrothermal systems exhibit a mineral and metal zoning with metals such as Fe (magnetite), Cu, W and Mo being laid down close to the pluton margin whereas Pb, Zn, Sn (and the element Mn) are commonly deposited more distally . Gold may be laid down either proximal or distal in these systems. A mineral-metal zoning is likely at Bunker Hill, with the Lefevre-Blue Vein occurrences being proximal while the more distal mineralization is represented by the Hand Steel Pb-Zn occurrence.

(9) GEOLOGICAL SETTING

The Bunker Hill property is located within the Omineca Belt and Kootenay Terrane of southeastern BC (Hoy and Dunne, 1997; 2001). The belt represents a zone of variably deformed and metamorphosed Proterozoic to Tertiary rocks along the boundary between the accreted Quesnellia terrane in the west and ancestral North America to the east (Hoy and Dunne, 2001). The belt formed during Jurassic to Early Cretaceous times when Quesnellia was accreted onto ancestral North America. This led to the Quesnellia rocks being thrust over the shelf and marginal rocks of the Kootenay Terrane leading to easterly-directed thrusting and folding (Price 1981, 1986).

In the Salmo area and further west, the Quesnellia is largely represented by the Rossland Group rocks, an arc package of early Jurassic volcanics, related intrusive rocks and sediments that were deposited on a Paleozoic basement (Hoy and Dunne, 2001). During the easterly movement of the Rossland Group, the Laib Formation sedimentary rocks in the Bunker Hill area were tightly folded, subjected to greenschist metamorphism and overprinted by a penetrative phyllitic foliation-cleavage. Thrusts related to the docking of the Quesnellia rocks further west were carried eastward into the Kootenay terrane rocks, and ramping locally caused structures to become steep or even overturned. In some instances these thrusts contain ultramafic rocks and volcanics that represent tectonic slices of the oceanic Slide Mountain Terrane (Hoy and Andrews, 2001).

Thus, the tectonic boundary between Quesnellia and North American or Kootenay Terrane rocks is commonly marked by thrusting, together with mafic and ultramafic rocks. The Bunker Hill property lies close to this terrane boundary, and the Laib Formation sedimentary rocks are cut by a number of steep, NE-trending structures, including the Tillicum Thrust Fault (Howard, 2000, 2003; Hoy and Dunne, 2001) which is associated with slices of ultramafic rocks.

Deformation during the Jurassic was accompanied by extensive plutonic activity, particularly in the Rossland Group (Hoy and Dunne, 2001) but this is not seen on the Bunker Hill property. This Jurassic plutonism includes a number of suites that range from older and strongly foliated intrusions to younger, massive bodies. These include the early to middle Jurassic "Nelson" intrusions, as well as others such as the "Rossland Monzonite", the "Silver King intrusions" and the "Eagle Creek Plutonic Complex" (Hoy and Dunne, 2001). Some of these suites are associated with a variety of mineral deposits, including the Coxey-Novely Mo-Au skarns at Red Mountain and the sulphide-rich Au veins that in the Rossland area were major gold producers (Hoy and Dunne, 2001).

During the early Cretaceous, the Kootenay Terrane rocks in the Salmo district were intruded by a number of granites bodies, including the Wallack Creek and Salmo stocks, and the smaller Bunker Hill Stock. This suite is economically important because it is related to the W skarn deposits in the Emerald-Tungsten Mining Camp which lies 13 km ENE of Bunker Hill. This camp contains the largest W skarn deposits in BC; it produced approximately 1.5 million tonnes of ore grading c. 0.5 % WO_3 (BC Minfile; Ray and Webster, 1997). The deposits were mined from at least four workings, the Emerald-Tungsten, Dodger, Invincible and Feeney (BC MINFILES 082FSW010, 011, 218, and 247 respectively). The scheelite-bearing garnet-pyroxene skarns are developed in Laib Formation calcareous metasediments close to their contact with the leucocratic, quartz-rich granite.

Like the mineralization present on the Bunker Hill claims, the W skarns in the Emerald-Tungsten camp are spatially associated with quartz and Fe sulphide-rich veins that carry Au, as well as a variety of telluride, selenide and other minerals enhanced in Ag, Pb, Bi, Te, Se, As and Sb (Ray and Webster, 1997). These Au-rich veins, which commonly lie structurally above the skarns (L. Dandy, personal communication, 2003) have been explored by Sultan Minerals Ltd. It is still uncertain whether the Au-Bi-bearing quartz-sulphide veins are related to, and a distal part of the W skarn system or whether they represent mineralization introduced at a later date, although the former idea appears to be the most likely (L. Dandy, pers. com).

Tertiary (largely Eocene) movements in the district resulted large, low-angle extensional faults and a variety of extrusive and intrusive magmatism, much of which is of alkalic composition. The extrusive rocks include the Marron Formation andesitic volcanics which have not been recorded on the Bunker Hill claims. The plutonic suite is represented by the Coryell Intrusions which are widely developed as large bodies and dike-sill swarms throughout southeastern BC. Compositionally, these range from felsic syenites and monzonites to mafic, biotite-rich lamprophyres. Thin lamprophyre dikes of this suite are seen on the Bunker Hill claims.

(10) GEOLOGY OF THE PROPERTY

(i) Sedimentary Rocks

The following geological description is based on the nine days of mapping (Maps 1 and 2) and on data presented by Hedley (1943), Fyles and Hewlett (1959), Wehrle (1997), Howard (2000, 2003), Hoy and Dunne (2001), Kennedy (2003) and the BC MINFILE.

Most of the mapped sections (Maps 1 and 2) are represented by a steeply to moderately dipping package of metasediments that are believed to belong to the Cambrian-age Laib Formation (Little, 1950; Fyles and Hewlett, 1959; Hoy and Dunne, 2001). This formation represents distal shelf sediments that were deposited in a relatively reduced environment. The compilation mapping by Hoy and Dunne (2001) shows that most of the sedimentary and volcanic packages in the Salmo district strike NE-SW. On the Bunker Hill property however, the Laib metasediments west of the elongate granite body strike north to NNE, and generally have foliations that dip easterly whereas the supracrustals lying east of the body trend NE to east and mostly dip southerly.

The main sedimentary lithologies present are thinly layered, foliated and cleaved micaceous **quartzites** (Units Q and aQ; Photos 2 and 3) and phyllitic to schistose **argillites** (Units A and cA; Photos 4); these range from gray to black in color, depending on the amount of quartz, feldspar and organic carbon present. Many of the graphitic **phyllites** contain disseminated Fe sulphides and have undergone shearing. Some argillites are siliceous (Unit cA) and grade laterally into the quartzites. In rare cases (at UTM 471307E – 5434706N for example) the argillites are weakly calcareous. Also present are small outcrops of **siltstone** (Unit Ss) as well as two thin (maximum 100 meters), elongate horizons of impure **limestone** (Unit L; Photos 5 and 6), one of which has been traced along strike for 800 meters (Map 1). The limestones are only seen west of the granite body, where they strike obliquely NNE towards the granite contact. The contact zone between southern limestone horizon and the granite marks the location of the Lefevre skarn (Maps 1 and 2). The limestone is thinly layered (Photo 5), gray to black in color and contains abundant organic carbon, as well as some disseminated pyrite-pyrrhotite. Chaotic ductile folding is seen in the unit (Photo 6) and the disharmonic minor structures range from open flexures to isoclinal folds. Howard (2000) noted that limestone samples assayed < 5 ppb Au.

Many of the metasediments possess a thin layering, ranging from < 2cm to 10 cm in thickness that is presumed to represent transposed bedding. The layering lies sub parallel to a variably developed chloritic S1 cleavage-schistosity, and many of the more argillaceous rocks have pronounced phyllitic fabrics.

(ii) Intrusive Rocks

The largest and most economically important intrusion on the Bunker Hill claims is a small granite body that, for the purposes of this report, is named the “Bunker Hill Stock” (Unit G). In addition there are rare and thin dikes of leucogranite that are probably related to the stock, as well as thin dikes of andesite (Unit a), aplite and lamprophyre. Minor amounts of mafic volcanic rocks are also present (W. Howard, pers. com) as well as some ultramafic serpentine (Unit Um); the volcanics and ultramafics may represent thrust slices of Slide Mountain Terrane oceanic rocks.

The Bunker Hill Stock, which intrudes the Laib Formation rocks, is probably Cretaceous in age and may represent a satellite body to the much larger Wallack Creek Stock whose western margin lies only 2 km further east. Mapping compiled by Hoy and Dunne (2001) suggests the Bunker Hill Stock is an irregular body with a maximum dimension of 1.5 km by 1.5 km. The main portion of the stock appears to lie immediately north of the claims. On the Bunker Hill property however, the stock is represented by an elongate, south-trending dike-like tongue of granite whose western margin is exposed in parts of the Lefevre trenches (Hedley, 1943) and on a road cut approximately 800 meters further north (Map 1). Mapping shows that the dike-like body is at least 1200 meters long and between 200 and 400 meters wide, but its southern limit is unknown (Map 1).

The Bunker Hill Stock probably belongs to the same suite responsible for the W skarns and Au-bearing quartz-sulphide mineralization seen in at the Emerald-Tungsten mining camp 13 km further ENE. The stock is medium to very coarse grained (Photo 7), massive and generally equigranular. It post-dates the regional deformation and is mostly undeformed except for local shearing, particularly along and close to its margins. Locally, it is very quartz-rich and leucocratic. Mafics minerals generally range from 0 to 5 percent, and are mostly biotite with sporadic sericite and hornblende. The granite carries trace amounts of disseminated pyrite and lesser pyrrhotite. Locally, the granite is cut by quartz veinlets and veins (Photo 7), some of which carry pyrite and molybdenite Craig Kennedy (pers. com); the author has seen a similar style of mineralization in the granites at the Emerald Tungsten camp. In rare cases the Bunker Hill Stock contains clots, veinlets and breccias of black tourmaline (Howard, 2000, 2003); this feature is seen for example at UTM 470910E – 5434776N, where the granite outcrop is feldspar porphyritic and may form part of a dike.

The Bunker Hill Stock is cut locally by several shear zones and narrow faults, notably at UTM 471548E – 5434959N and at 471784E – 5434746N (Map 1). At the former locality, the 1 m thick chloritized shear zone trends SSE and dips 80 west while at the latter location the closely-spaced fractures (10 – 30 cm apart) and thin shears strike NNE and dip 75 degrees east. The mafic minerals adjacent to the granite margins or close to the shears are extensively chloritized and the rocks are rust-stained. At UTM 471784E – 5434746E on the northern road section, the granite is cut by a thin (1.5 m) dike of crumbly, fine-grained dark lamprophyre that trends north and dips 42 degrees east. Approximately 350 m WNW on the same road section at UTM 471503E – 5434946N, a 2 m thick dike of black, biotite-rich lamprophyre cuts the stock. This dike lies only 10 m east of the granite margin; it strikes north and dips 76 west and, like the other lamprophyres probably belongs to the Eocene-age Coryell suite.

During the current mapping, contacts between the granite stock and the Laib Formation rocks were only seen at a few localities. One of these, in a road-cut at UTM 471503E – 5434946N, exposes the western edge of the stock which is a northern extension of the granite-metasediment contact noted by Hedley (1943) in the Lefevre trenches approximately 800 m further SSE. On the road-cut the stock margin is sharp, trends north to NNE and dips steeply west at between 60 and 70 degrees. The granite close to the contact is medium to coarse grained, sheared, chloritized and jarosite-stained, whereas the adjacent argillaceous and quartzitic country rocks to the west are biotite-hornfelsed and are cut by several thin granitic dikes. The on-strike western margin of the granite is seen further SSE at several localities (Maps 1 and 2), including close to the Blue Vein and Moly Vein areas, as well as at the Lefevre trenches. In all cases the contact is northerly trending and steeply dipping, although a true measured dip was only possible at one locality, at UTM 471629-5434632 which lies approximately 250 meters north of the Blue Vein area. Here the granite contact dips 60 to 70 degrees east, sub parallel to the S1 schistosity in the adjoining hornfelsed impure quartzites.

The Laib Formation metasediments adjacent to the stock are sometimes intruded by thin (< 5 m) dikes of aplite and medium-grained leucogranite. Siliceous hornfelsing is variably developed in the thermal aureole of the stock, which is generally < 200 meters wide, although locally (such as in the vicinity of the Hand Steel occurrence) hornfelsing and skarnoid occurs up to 400 meters from the granite. Where the country rocks are more quartz-rich and un-reactive, hornfels is less common. Hornfelsing is best developed in the argillites where it is marked by very fine-grained brown to purple-brown biotite, pervasive fine-grained silica-quartz and sporadic pale green clinopyroxene. Locally, the hornfels grades into fine grained “reaction-type” skarn or skarnoid (i.e. skarn formed by thermal metamorphism and not by the introduction of hydrothermal fluids). These skarnoid rocks are characterized by minor amounts of pale brown ?grossular garnets and pale green clinopyroxenes, as well as some biotite. In many cases they comprise interlayers of garnet-dominant, pyroxene-dominant and biotite-dominant alteration that have mimicked the transposed bedding. Some skarnoids contain trace pyrite ± pyrrhotite but they have little economic potential.

(11) STRUCTURE

Two periods of folding are recognized at Bunker Hill, both of which predate the ?Cretaceous Bunker Hill Stock. The regionally developed F1 deformation was the most intense and important of the two events. It took place under greenschist facies metamorphism and resulted in the district-wide S1 penetrative mica-chlorite cleavage and schistosity that overprints the metasediments. The intensity of the S1 fabric is variable throughout the Bunker Hill area. Many of the quartzite units lack the fabric while the more argillaceous rocks are strongly phyllitic. The planar fabrics lie parallel to the thin layering in the sedimentary rocks; the layering is believed to be bedding that was transposed during the F1 event. Studies by Fyles and Hewlett (1959) and Hoy and Dunne (2001) suggest that the district-wide S1 cleavage-schistosity developed during a period of isoclinal large-scale ductile folding, probably during the Jurassic fold-thrust movements that resulted from the docking of Quesnellia with ancestral North America. No isoclinal F1 small scale folds were definitely identified at Bunker Hill, although the limestone units contains a number of small-scale disharmonic and chaotic folds (Photo 6) ranging from open to isoclinal ductile structures; it is not certain whether these chaotic folds are F1 in age. At one locality (UTM 471355E – 5434350N) the argillaceous quartzites have a well marked mineral L1 lineation which plunges 40 degrees in a SSW direction, while in the extreme eastern part of the mapped area a similar L1 structures plunges 60 degrees south (Map 1). These are presumed to mark the plunge direction of the F1 fold exes.

A second episode of minor folding deformed both the layering and S1 cleavage-schistosity. This F2 event produced mostly open flexures (Photo 2) although some tighter folds were seen (Photo 4). Its significance is unknown but it may account for the occasional westerly dip of the S1 fabric in some metasedimentary rocks west of the granite, as well as the north to easterly changes in strike of the S1 fabrics in metasediments lying east of the intrusion. Both S-type and Z-type F2 minor folds were identified, suggesting the existence of some larger scale F2 structures. The few F2 minor fold identified have axes plunging westerly at between 50 and 70 degrees, while a series of well developed F2 structures at UTM 471406E – 5434060N have steeply dipping and E-W striking fold planes.

Shearing and faulting is common in the sedimentary units, particularly the argillites that contain abundant graphite and other organic carbon. Most of the movement has taken place parallel to the S1 foliations. One example of shearing is seen at the No 2 adit at the Bunker Hill mine (UTM 471485E – 5434285N) where shears in the organic-rich phyllites trend N-S and dip 62 degrees east.

Faulting was also seen at UTM 471420E – 5434950N along the eastern and structurally lower margin of one limestone unit. The faulted contact between the limestones and other metasediments further east is occupied by a 12 to 15 cm wide white quartz vein. This vein contains pyrite-pyrrhotite and it has been brecciated and re-cemented by a second generation of quartz.

The Bunker Hill Stock is also cut by a number of NW to NE-trending faults and chloritized shears indicating some post-Cretaceous brittle deformation in the area (Map 1); some shears in the granite are up to 1 m in thickness. The scheelite-bearing exoskarns and Au-rich quartz-sulphide mineralization seen in the southernmost Lefevre skarn trenches (UTM 471610E – 5434135N) are overprinted by strong jointing and fracturing. These closely spaced (1-5 cm) fractures trend E-W to ESE and dip steeply north (72 degrees); no strong fracturing with this orientation was observed elsewhere on the property, although the linear E-W creek in which the Bunker Hill adits were driven has a similar trend. It is noteworthy that the Bunker Hill Mine, the Blue Steel, Moly, Kenneth Trench and Ness all lie close to an E-W trend which is also the orientation of the creek draining the mine area. Thus, it is likely that a series of E-W faults cut the area, and they may also have caused minor left lateral displacement of the granite margin (Map 2).

To summarize: at Bunker Hill the Laib Formation rocks have undergone greenschist facies metaphorphism and have been deformed by two episodes of pre-Cretaceous folding, as well as some pre and post-Cretaceous brittle shearing and faulting. The first (F1) ductile phase resulted in the property-wide S1 phyllitic and schistose planar fabrics that lie parallel to the transposed bedding layers. The second, less intense F2 episode caused open to moderately tight folding of the S1 fabrics and layering. Some NE to NW shearing and faulting has also overprinted the Bunker Hill Stock, and parts of the Lefevre skarn are cut by strong E-W –trending joints and fractures.

(12) MINERALIZATION:

(i) Types of mineralization
The Bunker Hill claims contain three related types of mineralization. These are:

Type 1: W-bearing scheelite-garnet-pyroxene exoskarns that lie immediately adjacent to the granites western margin; this mineralization is best exposed in the Lefevre trenches and pits at UTM 471610E – 5434135N (Fig. 4A). This 30 m by 100 m long skarn, particularly where exposed in the southernmost pits and trenches, is overprinted by the Type 2 Au-bearing quartz-sulphide stringer mineralization. Mineralization exposed in the pits was recently sampled by Tom and Craig Kennedy (Appendix B; Fig. 4B). Many samples are enhanced in Au, with values up to 36274 ppb (Appendices A and B). In addition, the rocks were enhanced in Ag, Co, As, Bi and W. None of these rocks were analyzed for Se or Te, but some other samples collected elsewhere on the property were enriched in these elements (Appendix A).

Type 2: Au-bearing quartz veins and stringer zones containing pyrite with sporadic trace galena, sphalerite and tellurides. One set was worked at the old Bunker Hill Mine, although there are several other veins east and northeast of the mine that have only been trench and sampled, including the “Blue” and “Moly” veins. The sulphide and quartz stringer mineralization that overprints the skarn at the Lefevre trenches also belongs to this type. The larger veins exceed 1.3 meters thick and exceed 40 meters in length, and they occur up to 200 meters from the granite-metasediment contact. In most cases the veins are hosted by Laib metasedimentary quartzites and argillites, but in a few cases (e.g. in the Blue Vein vicinity) they pass eastwards into the granite body, although they then quickly die out. The veins at the Bunker Hill Mine include minor sericite and calcite as well as abundant coarse-grained pyrite with lesser pyrrhotite and minor to trace amounts of arsenopyrite, galena and sphalerite. Warren and Cummings (1937) found some unidentifiable Bi, Pb and Te-bearing minerals that may include galenobismuthinite, as well as Au tellurides. The character and chemistry of this Au mineralization shows similarities to the Au-As-Bi-Te-rich mineralization that is spatially associated with the W skarns in the Emerald-Tungsten camp, located about 13 km further ENE. It also has strong analogies in its age, spatial relationships and chemistry, to the Cretaceous mineralization at the Fort Knox camp in the Fairbanks mining district of Alaska.

Type 3: pyrite-galena ± sphalerite mineralization hosted by sedimentary country rocks as typified by the “Hand Steel” occurrence which lies 500 meters west of the granite margin. This more distal style of mineralization tends to lack distinct quartz veining but instead comprises sparse sulphides (pyrite, galena, sphalerite) disseminated in altered and bleached argillaceous quartzites.

(ii) Mineralization occurring at various places on the Bunker Hill Property

(a) Bunker Hill Mine Area.

Three adits were originally driven although all are now collapsed; only the two upper ones were visited by the author and are shown on Maps 1 and 2. The lower of these (the No.2 or “gallery adit”, Howard, 2000) is located at UTM 471450E – 5434290N and trends into the hillside in an ESE direction. The head of this adit exposes north-striking and steep easterly dipping phyllitic argillites that are locally sheared and contain disseminated pyrite-pyrrhotite. In front of the adit is a rock waste pile containing abundant large float, up to 0.5 m in width, of white massive quartz with variable amounts of Fe sulphides (Photos 9, 10 and 11).

The second higher adit, the No. 1, cuts into the hillside in a ENE direction (Maps 1 and 2). It exposes a quartz vein (or veins) that has been discontinuously traced for approximately 100 m further northeast (Howard, pers. com). At the adit the vein is between 1.2 and 1.6 m in thickness (Photos 12 and 13) but Howard (2000; pers. com) reports that the vein elsewhere reaches 3 m in width and locally bifurcates. Also exposed at the collapsed head of the adit are sheared, organic-rich phyllites, argillites and argillaceous quartzites whose foliation is northerly striking and dips 62 degrees east.

Massive white to pale gray, sulphide-bearing quartz vein material similar to that seen on the waste pile further downslope outside the No. 2 adit are exposed either side of the 12 m-long cutting in front of the No. 1 adit. Although very poor weather and light conditions at the time made observations difficult, it is believed that the two quartz outcrops seen either side of the cutting belong to a single vein that trends NE between 040 and 055 degrees. On the north side of the cutting the vein is 1.2 to 1.4 m wide, while the outcrop seen on the south side is thicker at 1.4 to 1.6 m (Photo 12). The eastern and structurally upper margin of the vein at the latter outcrop is in sheared contact with a phyllitic quartzite and this upper vein margin strikes 055 and dips 30 degrees SE. In both outcrops the quartz veins are highly fractured (Photos 12 and 13); this closely spaced, steeply dipping fracturing strikes N-S, sub-parallel to the phyllitic foliation in the nearby argillites; it is possible that this fracturing in the veins is related to the late shear movements seen in the nearby phyllites and argillaceous quartzites. The 2 to 6 cm-wide margins of the quartz veins are jarosite-hematite stained and tend to lack the steeply dipping cross fractures but instead have shears aligned parallel to the vein margins. The quartz veins are generally massive but Howard (2000, 2003) notes at least three generations of quartz growth and infilling. On the lower waste dump some of the quartz float contained rare drusy cavities, up to 2 cm long, lined with very coarse quartz crystals.

In addition to the abundant quartz, the Bunker Hill veins include minor sericite and calcite as well as variable, and locally abundant amounts of sulphides (Photo 10). The sulphides occur as veins and veinlets, blebs, disseminations and masses. Coarse-grained and crystalline pyrite is the commonest sulphide with lesser amounts of rare, sporadic pyrrhotite and minor to trace amounts of arsenopyrite, galena and black sphalerite. Warren and Cummings (1937) recognized some unidentifiable Bi, Pb and Te-bearing minerals that may include galenobismuthinite, as well as Au tellurides. Howard (2000) reports channel and grab samples taken at the adits containing up to 5 g/t Au as well as being enhanced in Bi and Te, but generally low in W (c. 5 ppm). This Au-Bi-Te geochemistry, which was also supported by the work of Kennedy (2003), shows similarities to the quartz-sulphide mineralization at the Lefevre trenches, and the younger quartz-bearing Au-Bi-Te-Se-As mineralization spatially associated with the Emerald-Tungsten W skarns (Ray and Webster, 1997).

(b) Lefevre Skarn Area

About 200 m SE of the Bunker Hill mine adits (Map 2), there are a series of trenches and pits lying between UTM 471597E – 5434190N (to the north) and UTM 471610E – 5434135N (to the south). At least ten trenches and five blasted pits are present in this area (Map 2); they were mapped and described by Hedley (1943; Fig. 4A) and later by Little (1959). The workings have exposed a 100 m-long, N-S trending zone of skarn alteration as well as the western margin of the Bunker Hill Stock. Little (1959, p. 100-102) states as follows:

> *"bedrock consists of argillaceous quartzite and micaceous schist, and minor skarn ... intruded by granite, probably ... of Cretaceous (?) age. The bedding in the quartzite strikes 004° and dips 83° E. In trench # 4 and in the pits at either end, finely disseminated scheelite is distributed evenly. A chip sample from this trench taken across 35' assayed 0.33% WO_3 with no detectable MoS_2. This represented the best scheelite-bearing material observed, except over narrow widths. In trench # 6 a lenticular vein of quartz about 10 inches wide is estimated to contain 2 - 3 % WO_3 ..."*

Wehrle (1998) notes that the layout of the trenches suggests they may have been blasted to expose crosscutting auriferous quartz veins rather than the skarn, although Hedley (1943) makes no mention of this and instead emphasizes the W skarn nature of the showing. Wehrle (1998, 1999) regarded the trench area to have an exploration potential for bulk tonnage Au ± W skarn; Howard (2000) notes the hard, compact nature of the skarn which causes sampling difficulties.

Tungsten and gold analyses of twelve un-described rocks from the trenches are listed by Kaufman (1984) and Harris (1984). Four ran over 900 ppb Au as follows:

Sample	Au ppb	W ppm
MH-84-12	1000	740
MH-84-19	1600	990
MH-84-20	940	1710
MH-84-23	1050	>2000

Howard (2000) sampled the trenches and confirmed the Au enrichment (c. 1000 ppb) in sulphide-rich parts of the skarn. He states as follows:

Skarn and quartz veins were sampled and analyzed separately. The first pit encountered on Line 2+50N is Trench # 5 (Little, 1959, numbering). Samples were:

BW-0109 from Trench # 5 a bulk sample of a 50 cm wide quartz vein oriented 030 36 NW on the N side ran 6710 ppb Au 1.4 ppm Ag 453 ppm Bi 1.54% Fe 16 ppm Te 127 ppm W and 60 ppm Cu.

BW-0110 from Trench # 5 a composite sample of the pit's host rock ran 1156 ppb Au 104 ppm Bi and 10 ppm Te. The skarn has magnetic pyrrhotite to 25% with interstitial trace chalcopyrite. It is mostly very dark green pyroxene (actinolite?) with common red garnet. Some epidote and chlorite is present. No acid reaction was noted.

BW-0111 from Trench # 3 a composite bulk sample of skarn ran 675 ppb Au 46 ppm Bi and 9 ppm Te.

BH-112 from Trench # 6 a 30 cm vuggy quartz vein with 10% dark gray powdery sulphosalt(?) minerals ran 300 ppb Au 14 ppm Bi and 2 ppm Te. This lenticular vein has an estimated 2-3 % WO_3 (Little, 1959).

BH-113 from the S side of Trench # 7 a 35 cm of very vuggy quartz vein with minor undetermined dark gray sulphides ran 1825 ppb Au 45 ppm Bi and 3 ppm Te.

BH-114 from the N side of Trench # 7 a very soft, pinkish gray argillic - altered quartz vein ran 2,545 ppb Au 114 ppm Bi 1.69 % Fe 5 ppm Te 69 ppm Mo 3,061 Mn and 337 ppm W.

BH-115 from the N side of Trench # 7 a composite chip sample over 1 m of very hard actinolite - garnet skarn ran 200 ppb Au 13 ppm Bi and 5 ppm Te.

BH-314 from Trench # 10 a selected piece of garnet - actinolite (?) pyroxene - pyrrhotite - arsenopyrite - scheelite skarn ran 1225 ppb Au 100 ppm Bi 9.57% Fe 130 ppm Co 235 ppm Ni 31 ppm Te and 435 ppm W.

BH-315 from Trench # 10 quartz vein float ran 9100 ppb Au 464 ppm Bi 1.09% Fe 31 ppm Te and 137 ppm W.

The Lefevre skarn trenches and pits were also recently re-sampled by Tom and Craig Kennedy as part of their prospecting survey (Kennedy, 2003; Appendices A and B). Many of these samples are enhanced in Au, with values up to 36274 ppb. The data listed in Appendix B shows that the mineralization in the trenches is also enhanced in Ag (maximum 62 ppm), Co (max 422 ppm, As (> 1%), Bi (max 1447 ppm) and W

(>200 ppm). None of the samples listed in Appendix B were analyzed for Se but some samples collected on the property were enhanced in this element (maximum 4.7 ppm; Appendix A).

The author visited the Lefevre trenches and pits and noted that the amount of quartz veining and sulphides increased southwards in the workings. Due to slumping in some trenches and very poor weather and light conditions at the time, the western margin of the Bunker Hill Stock as outlined by Hedley (1943) and Little (1959) was not seen. However, angular granite float is abundant at the eastern end of some trenches. East to west, the trenches and pits expose a 10 to 30 m wide section of strongly skarn-altered and mineralized metasediments that can be traced N-S for about 100 m. The metasediments range from massive to thinly layered (?transposed bedding) and are highly schistose. They include micaceous quartzites and quartz-bearing phyllites; no marbles or limey metasediments were seen although Hedley (1943) suggests limy schists were present originally. In places he noted the presence of thin (<3 m) granite dikes which trend N-S parallel to the nearby margin of the Bunker Hill Stock. Hedley (1943) states that the contacts between the skarn and the unaltered schistose meta-sediments are “vague”.

As a whole, the S1 cleavage-schistosity exposed in the trenches strikes N-S and dips moderately to steeply (55 to 80 degrees) east towards the nearby Bunker Hill Stock. At the northern end of the trenches, immediately north of Pit # 1 (numbering from Hedley, 1943) there are outcrops of a dark, well foliated biotite hornfels which is overprinted by garnet-pyroxene skarn: this in turn is cut by veinlets and minor disseminations of pyrite-pyrrhotite. There has been some shearing parallel to the schist/cleavage planes which here dip 78 E. At this locality and elsewhere in the trenches the skarn alteration has mimicked the original thin sedimentary layering and now consists of alternating layers enriched either in pale brown garnet, pale green clinopyroxene or (if surviving hornfels is present) dark brown-biotite. South of Pit # 1, dark brown massive skarn is seen together with minor pyroxene and some Fe sulphides (Photo 8). However, further southwards close to Pit # 2 (Hedley, 1943) disseminated scheelite was seen in the garnet-pyroxene skarn, and there is an increase in the amount of irregular white quartz veins ± Fe sulphides ± arsenopyrite; these veins reach 15 cm in width. The author was impressed by the strong similarities between this alteration at the Lefevre trenches and the Au-Bi-As quartz-sulphide-rich mineralization described in the Emerald-Tungsten W skarn camp (Ray and Webster, 1997).

In the southernmost pit (No. # 5 of Hedley, 1943), the garnet-pyroxene-scheelite skarn is largely overprinted by abundant and widespread quartz-sulphide mineralization. The latter includes thin veins of white to gray quartz as well as pods and veins of massive pyrite with lesser pyrrhotite and minor arsenopyrite. In this area the rocks are cut by a series of closely spaced (1 – 5 cm apart) fractures trending E-W to ESE and dipping 72 degrees north.

(c) Moly Trench Area
The Moly Trench lies approximately 200 meters ENE of the Bunker Mine area. It was put down to explore a 40 to 50 meter-long quartz vein; thick vegetation made GPS readings unreliable but the eastern end of the trench lies close to UTM 471677-5434333. About 5 meters east of the trench there is a 1.5 meter-deep pit but no exposure was seen. The vein and trench trend easterly (080 to 090 degrees); throughout much of its length the dip of the vein is uncertain due to poor exposure but towards its eastern end it dips 35 degrees north. The vein varies from 0.2 to 1.25 meter in width and comprises mostly white quartz that in rare locations carries blebs and pyrite, galena ± sphalerite ± molybdenite. Throughout its western part the vein cuts rust-weathering and hornfelsed quartzitic Laib metasediments, but to the east it is hosted by fine to medium grained granite. The vein appears to be thicker towards the granite but there is no evidence it continues far into the intrusion.

(d) Blue Vein Area
This area lies approximately 50 meters north of the Moly Trench in the vicinity of UTM 471628-5434370 (Maps 1 and 2). Here, highly siliceous and hornfelsed metaquartites lying immediately adjacent to the granitic body have a strongly north striking S1 schistosity that dips easterly towards the granite margin. The metasediments, which are locally altered to either garnet-bearing skarnoid or sericitic greisens, are cut by a number of white quartz veins (Photos 14 and 15). Veins can be traced along strike for more that 25 meters and, similar to the situation at the Moly Trench, some pass eastwards into the granite. The veins are mostly < 0.25 meters wide, although some reach 2 meters in outcrop width. They mostly comprise massive white quartz with rare small vuggy cavities. Some veins are cut by a strong, closely-spaced fracturing that is orientated normal to the vein margins (Photo 15); similar fractures are noted in the Bunker Hill mine veins (Photos 12 and 13). The veins carry minor pyrite, as well as some visible gold and possibly some bismuth sulphides (C. Kennedy, personal communication). No alteration haloes are noted along the vein margins. At least two vein sets are recognized. One set trends easterly, similar to the vein exposed in the Moly Trench. The other set strikes northerly, sub-parallel to the trend of the granite margin and the S1 foliation. Where measurements are possible, this set dips moderately east (40 to 45 degrees; Photo 15), and at one locality the veins sharply cut the west-dipping S1 fabric.

(13) GEOCHEMISTRY

Tom and Craig Kennedy collected 75 samples from throughout the Bunker Hill claims (Fig. 3) as well as a further 17 samples from the Lefevre trenches (Fig. 4B); the assay results for these samples are shown in Appendices A and B. There are numerous samples that are highly enhanced in Au (maximum 36274 ppb; sample BH21), as well as Ag, Pb, Mo, W, As, Bi and Se. The sampling revealed a N-S-trending, 1.5 km-long zone with anomalous Au values that stretches north and south of the Lefevre trenches (Kennedy, 2003). This zone, which lies west of the western margin of the Bunker Hill Stock, is still open to the south and north, and may represent extensions of the quartz-sulphide Au mineralization seen in the Lefevre trenches. It needs to be further explored and delineated, particularly to the south where visible gold was panned from the SW-draining creek in the vicinity of UTM 471050E – 5433400N (Map 1; Craig Kennedy, pers. com).

The entire data in Appendix A was plotted by the author to see if any correlations exist between Au and other metal or pathfinder elements. Some binary plots are shown in Fig. 5. Gold has a very good positive correlation with Bi and moderately good correlations with Ag, As, Mo and Pb. An excellent correlation between Pb:Ag is also seen and a weak to moderate correlation exists between Cu:Ag and Cu:Au. No correlation is seen between Au:Zn, Au:W and Au:Ba (Fig. 5) and between Au:Cr, Au:Ni and Au:Co. Due to a small number of Se analyses (Fig. 5), the relationship between Au:Se is uncertain.

Thus, previous sampling (Howard, 2000; Kennedy, 2003) proves the existence of widespread Au mineralization on the Bunker Hill claims. The plots (Fig. 5) suggest that the best pathfinder elements for Au mineralization on the claims are Au and Bi, whereas As, Mo, Cu and Pb are moderately useful. It should be noted that W is generally a poor Au pathfinder, and that apart from the Lefevre trenches area, the two metals are not well associated spatially. This is significant regarding future exploration, particularly for any soils sampling surveys.

(14) SAMPLE PREPRATION, ANALYSES AND SECURITY

No samples for analysis or assay were collected by the author during his two-day-long visit to the Bunker Hill property. The field and laboratory procedures for the samples collected by W. Howard on the Bunker Hill claims are fully outlined in his report (Howard, 2000). In the field, each of the rock samples collected for assay recently by Tom and Craig Kennedy during their reconnaissance prospecting on the three properties were placed in marked plastic bags. These were then gathered in sealed rice bags for direct shipment to Acme Analytical Laboratories Ltd., at 852 East Hastings Street, Vancouver, BC. Analyses were completed at the laboratories using standard multi-element ICP-ES methods. Gold assays were also determined to ppb levels using ICP-MS. The assay data is presented in Appendices A and B.

(15) DATA VERIFICATION

The data contained within this report have not been directly verified by the author. The author recognizes:

i. All geochemical and assay data documented in this report have been provided by an ISO 9002 certified lab, Acme Analytical Laboratories Ltd., who have used approved quality control measures.

ii. The results of the assays are well within the generally expected range for mineralization associated with deposits of the type described in this report.

(16) CONCLUSIONS & RECOMMENDATIONS

The following conclusions are made concerning the Bunker Hill property:

1. It contains the following three types of mineralization, which are believed to reflect a proximal to distal metal zoning genetically related to, and outboard from the Bunker Hill Stock:

> **Type 1.** Proximal scheelite bearing garnet-pyroxene skarn which is seen at the Lefevre trenches in a 30 m wide and 100 m long zone. This mineralization overprints hornfelsed, phyllitic and quartzitic Laib Formation meta-sediments close (< 50 m) to their contact with the western, steep-dipping margin of the Cretaceous-age Bunker Hill Stock.
>
> **Type 2.** Proximal to intermediate placed Au-bearing quartz veins with pyrite ± pyrrhotite ± arsenopyrite ± sphalerite ± galena mineralization that is sporadically enhanced in Ag, Bi, As, Te and possibly Se. This style of mineralization has the best economic potential on the claims. It is seen at the following localities: (a) the old Bunker Hill mine where it occurs in quartz veins, over 1 m in thickness, that cut phyllitic argillites and dirty quartzites approximately 200 m west of the Bunker Hill Stock, (b) at the Moly Trench where it occurs as a 0.2 to 1.25 meter thick quartz vein that exceeds 40 meters in length and trends E-W, (c) in the Blue Vein area where a variety of easterly and northerly striking quartz veins are seen, and (d) in parts of the Lefevre trenches where it occurs as quartz stringers and thin veins that overprint the earlier scheelite-garnet-pyroxene skarns.
>
> **Type 3.** Distal pyrite-galena ± sphalerite mineralization hosted by sedimentary country rocks as typified by the "Hand Steel" occurrence which lies 500 meters west of the granite margin. This mineralization tends to lack distinct quartz veining but instead comprises sparse sulphides (pyrite, galena, sphalerite) disseminated in altered and bleached argillaceous quartzites.

2. The Au-rich Type 2 quartz vein mineralization is considered to have the greatest economic potential on the claims. The skarns (Type 1) and more distal Pb-Zn Type 3 mineralization have a poor potential economically.

3. The Au-bearing quartz veins are more commonly hosted by metasediments at, or immediately outboard from the western margin of the granite. There are at least two vein sets (N-S and E-W), and their location and orientation are thought to be partly controlled by brittle fracturing and competency differences between the granite and the Laib rocks.

4. Types 1 and 2 listed above closely resemble the mineralization explored by Sultan Minerals in the Emerald-Tungsten camp, located approximately 13 km ENE of Bunker Hill. They also show some strong similarities to the W-Au mineralization exploited in the Fort Knox Mine area in the Fairbanks district of Alaska (Allegro, 1987). In the Fort Knox area the Cretaceous stocks are surrounded by proximal skarn

and more distal hornfels for distances of up to 10 km. There are three styles of mineralization in that area and these could have relevance to future exploration at Bunker Hill. These three styles are: (a) Au mineralization hosted in the stocks, (b) W-bearing skarns immediately adjacent to the stocks and (c) gold located distally (up to 10 km) from exposed stock contacts. In the latter style, the gold is in sulphide-calcite-sericite-bearing quartz veins that are enhanced in As, Bi and Te with sporadic Cu and Mo.

5. At both Bunker Hill and at Emerald-Tungsten, the skarns predate the Au mineralization. However, because there are uncertainties about the relationship between these two generations of mineralization, the following two possibilities should be considered:

(a) The Au-bearing quartz-sulphide mineralization is unrelated to the older scheelite- skarns but formed spatially close to the Cretaceous granite stock margins during a tectonic-hydrothermal event that exploited the structural differences between the more competent stocks and the more incompetent metasediments. *If true, future exploration should focus on* ***all*** *areas close to any intrusive margins in the district because the Au mineralization need not spatially occur with W skarns*

(b) The W skarns and Au-bearing quartz-sulphide mineralization are related to one another with the latter representing a late and distal Au-bearing phase of the skarn system. This is the current accepted view (L. Dandy, pers. com) who states that in the Emerald-Tungsten camp most of the Au-Bi-bearing quartz mineralization lies *distal and structurally above* the W skarns. Although most of this auriferous mineralization in the camp is outboard of the W skarns, the author observed Au-bearing quartz-sulphide veins close to the granitic Emerald Stock and within the W skarns, a situation analogous to that seen in the Lefevre trenches.

6. Using either of the two models listed in Point 5 above, metasediments lying immediately outboard (<500 m) from the Bunker Hill Stock margins represent important areas for future prospecting and Au exploration. At the Bunker Hill mine, the outcropping quartz vein appears to strike NE and dip moderately SE, cross-cutting the S1 foliation in the hosting argillites. However, Craig Kennedy (pers. com) notes that the east to SE dip of the vein changes along strike from moderate to steep. The NE or SW extensions of the vein and the possible changes in dip need to be verified. The dip changes could reflect the presence in the hosting argillites and quartzites of open F1 or F2 folds that may have controlled the vein. The vein dips eastwards towards the steep west-dipping margin of the Bunker Hill Stock, and it is possible that economic Au mineralization could be found where the vein intersects the stock at depth (Fig. 6). The stock margins may also locally undulate or be irregular due to the presence of older F1 or F2 structures in the Laib Formation. These irregularities along the granite contact could provide good traps for the Au (and W) mineralization. It is likely that Au orebodies lying close to the granite contact and influenced by any F1 or F2 structures would also be controlled by the plunge of these folds.

7. While the Bunker Hill mine veins lie more distally (c. 200 meters) from the stock and are only hosted by metasediments, all of the other vein occurrences lie < 50 meters from the stock; at the Blue Vein and Moly Trench some veins pass eastwards for short distances into the granite.

8. The greatest concentration of hydrothermal alteration and Type 2 Au-bearing quartz veins seen on the property lie within a triangular area marked by the Bunker Hill mine in the west, the Blue Veins to the north and the Lefevre Trenches to the south. Places within or immediately adjacent to this triangular area are thought to have the greatest economic potential, although at least one other location (noted immediately below) warrants further mapping and prospecting.

9. The Laib metasediments flanking the western edge of the granitic stock contain at least two thin (<100 meter), NNE trending units on impure limestone that are cut by the north striking granite margin. The intersection between the southern limestone and the granite marks the location of the Lefevre skarn (Maps 1 and 2). The precise location between the northern limestone horizon and the granite contact is unknown (Map 1) and has not been mapped. This vicinity needs to be prospected for possible skarn mineralization similar to that at the Lefevre Trench.

10. The main controls of mineralization are:
- (i) Proximity to the western margin of the granite body where brittle fracturing and competency differences have favored vein formation.
- (ii) The presence of limey metasediments adjacent to the granite for the development of skarn.
- (iii) N-S and E-W structures, which have controlled the Au-bearing quartz veins. The N-S structures have followed either the granite contact, or the bedding and/or S1schistosity in the metasediments.

11. The Bunker Hill property has a good potential a small, high grade, vein-hosted gold deposit, and further exploration for this style of mineralization should continue.

The following recommendations are made for the Bunker Hill claims:

5. Map the full southern extension of the elongate, dike-like granitic body and prospect its margins (particularly along the western contact).
6. Drive a 500 meter-long spur road westwards towards the Blue Vein-Lefevre Trenches from the existing upper and eastern road. This should be constructed to pass over the Kenneth and Lefevre Trenches and the Blue Vein area, and may hopefully provide more exposure.
7. Prospect for skarn in the area where the northern limestone horizon intersects the western margin of the granite (Map 1)
8. The area where Kaufman (1984) and Harris (1984) conducted a 5-line soil sampling program for Ryan Exploration should be re-sampled. It is recommended that the E-W lines be placed 100 m apart and soils samples collected at 50 m space intervals. The grid should extend further south than the

former Ryan Exploration grid in an attempt to cover the stream basin where Craig Kennedy panned visible gold (in the vicinity of UTM 471050E – 5433400N).

9. Ryan Exploration only assayed their samples for Au and W. It is recommended that the soil samples should be subjected to multi-element analysis that would include Au, Bi, Pb, W and As.
10. Using the Fort Knox Alaska model as an exploration guide, reconnaissance prospecting outside claims could be conducted in the area between the Bunker Hill Stock in the west and the Wallack Creek Stock to the east.

(17) ACKNOWLEDGEMENTS

The author thanks the following persons for their assistance during the field work and report-writing: Jim McDonald, Trygve Hoy, Craig Kennedy, Tom Kennedy, William Howard, Linda Dandy and Wayne Jackaman.

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(19) PHOTOGRAPHS

Photo 1: Photo looking west from UTM 471850-5433813 on the Bunker Hill property showing the Pend-D'Oreille River valley (left distance) and the BC Hydro cut power line (right distance). The vegetated area in foreground is underlain by the Bunker Hill Stock.

Photo 2: Argillaceous meta-quartzites with the S1 fabric deformed by small-scale F2 folds. The photo is taken looking north at UTM 473390-5433622, and the folds antiform to the west (left).

Photo 3: Foliated schistose meta-quartzite cut by horsetail and sigmoidal quartz veining. Approximately 100 meters WNE of the Hand Steel occurrence, at UTM 471156-5433975.

Photo 4: Argillitic schist deformed by small-scale ?F2 folds with slip surfaces along the fold limbs. UTM 473039-5434639.

Photo 5: Thin bedded grey limestone and calcareous siltstone. Approximate UTM 471100-5434330.

Photo 6: Chaotic, disharmonic ?F1 folding in dark, thin-bedded impure limestone. Road outcrop located at approximate UTM 471457-5434964.

Photo 7: Bunker Hill Stock. Coarse grained granite with thin white quartz veins. UTM 471911-5433821.

Photo 8: Rusty-weathering, pyrite-rich garnet-pyroxene skarn exposed in the Lefevre Trenches. Approximate UTM 471611-5434199.

Photo 9: Waste dump in front of the No 2 adit at the Bunker Hill Mine with large float of white, vuggy and sulphide-bearing quartz-vein material. Photo was taken looking SE at approximate UTM 471450E – 5434290N.

Photo 10: Close-up view of white vuggy quartz vein material with veins and blebs of pyrite ± pyrrhotite ± gold. Waste dump in front of the No 2 adit, Bunker Hill Mine, UTM 471450E – 5434290N.

Photo 11: Close-up view of white vuggy quartz vein material with some pyrite ± pyrrhotite ± gold. Waste dump in front of the No 2 adit, Bunker Hill Mine, UTM 471450E – 5434290N

Photo 12: Outcrop of 1.4 meter-wide quartz vein seen near the No 1 Bunker Hill adit (UTM 471485E – 5434285N). Note the strong sub-vertical fracturing in the vein, close to its contact with phyllitic quartzites and argillites.

Photo 13: Close-up of highly fractured quartz vein seen in Photo 12. The steeply dipping fractures strike N-S, sub-parallel to the phyllitic foliation in the hosting argillites and quartzites.

Photo 14: Granite (mostly moss-covered) cut by a white quartz vein that can be traced for 25 meters. The vein locally reaches 2 meters in outcrop width, and is flanked by several 5 to 10 cm wide veins. Blue Vein area, photo taken looking west at UTM 471659-5434413.

Photo 15: A north striking, east-dipping, 1 meter-wide quartz vein that cuts hornfelsed impure meta-quartzites in the Blue Vein area. The vein is at least 14 meters long. Note the abundant fractures in the vein. Photo taken looking north at UTM 471628-5434370.

(20) CERTIFICATE OF AUTHOR

I, Gerald Edwin RAY, P.Geol., P. Eng., do hereby certify that:

1. I am currently employed as a consultant geologist by: **Kootenay Gold Corp.**

2. I graduated with B.Sc., degree in Geology from the University of Bristol (UK) in 1966. In addition, I later obtained a Ph.D., in Geology from Leeds University (UK) in 1970.

3. I am a member of the Association of Professional Geoscientists of British Columbia and the Association of Professional Engineers of Saskatchewan. In addition, I hold membership with the Institute of Mining and Metallurgy (UK) and am a "Chartered Engineer" in the UK and European Union.

4. I have worked as a geologist a total of 35 years since my graduation from university.

5. I have read the definition of "qualified person" set out in the National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with professional associations (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

6. I am responsible for (subject to points noted in the "Disclaimer" - section 3) the preparation of this assessment report titled **"**THE GEOLOGY & MINERAL POTENTIAL OF THE CLY 1 & 2 CLAIMS, southeastern British Columbia, Canada" and dated the 25th September 2004 relating to the Kootenay Gold Corps., properties. I visited the Bunker Hill Gold property for 9 days in October 2003 and June 2004.

7. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclosure which makes the Technical Report misleading.

8. I am independent of the issuer applying all the tests in section 1.5 of the National Instrument 43-101.

9. I have read National Instrument 43-101 and Form 42-101FI, and the Technical Report has been prepared in compliance with that instrument and form.

10. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 25th September 2004

Signature by qualified person | Stamp of qualified person

Printed name of qualified person | 25^{th} September 2004

(22) STATEMENT OF COSTS

BUNKER HILL MAPPING PROJECT - G.E. Ray
October 2003-June 2004,

A: Work related to 1st report (October 2003 trip)	***C$***
5 nights at Salmo motel	396.75
1 night, Grand Forks motel	62.1
Meals	97.19
Travel, 1628 km at 40c per km	651.2
Travel, 7 days at $40 pday	280
Ferry, 2 trips at $39.25	78.5
Printing & binding report	47.06
Minor expenses (mail, phone)	20.95
Wages, 17.5 days at $400 pd	7000
GST on wages	490
B: Work related to 2nd report (October 2003 trip)	
Wages, 2 days at $400 pd	856
Photocopying & printing	93.97
Minor costs (phone, mail, parking)	16.04
C: Work related to 3rd report (June 2003 trip)	
1 night at Greenwood motel	55.2
6 nights at Salmo Motel	442.75
Meals	324.11
Drafting figures, 8 hours at $38 p hour	325.28
Drafting maps, 35 hours at $38 p hour	1330
Printing maps	276
GST on maps	93.1
Printing and binding	85.1
Travel, 1930 km at 40c p km	772
Travel, 8 days at $40 per day	320
Ferry costs	80.5
Minor costs (phone, parking, mail)	24.5
Wages, 8 field days at $450 pd	3600
GST on above wages	252
Wages office work, 38 hours at $50 p hours	1900
GST on office work	133
TOTAL WAGES + GST	**14231**
TOTAL TRAVEL COSTS	**2182.2**
TOTAL ACCOMODATION COSTS	**956.8**
TOTAL MEAL COSTS	**421.3**
DRAFTING & PRINTING COSTS	**2250.51**
MINOR COSTS	**61.49**
GRAND TOTAL OF ALL COSTS	**$20,103.30**

Appendix A: Assay results of samples collected by Tom & Craig Kennedy from the Bunker Hill Claims, BC (see Fig. 3)

ID	UTM EAST	UTM NORTH	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm
BH-01	473928	5436441	<1	3	13	7	0.3	3	3	252	1.18	171	<8	<2	14	9	<0.5	<3	<3	2	0.03	0.024	18	6
BH-02	473870	5436757	1	3	22	26	<0.3	5	2	910	0.96	22	<8	<2	13	8	<0.5	<3	<3	7	0.09	0.030	26	6
BH-03	473426	5435764	5	5	23	6	<0.3	5	<1	42	0.83	9	<8	<2	2	4	<0.5	<3	<3	1	0.01	0.008	9	12
BH-04	471421	5435261	1	7	5	8	<0.3	3	2	505	0.75	2	<8	<2	13	6	<0.5	<3	<3	2	0.05	0.023	25	4
BH-05	471601	5435600	1	6	47	13	1.0	2	2	73	2.38	71	<8	<2	10	9	<0.5	<3	<3	2	0.02	0.020	21	5
BH-06	471846	5435256	1	5	3	2	<0.3	3	1	51	0.62	<2	<8	<2	9	5	<0.5	<3	<3	2	0.01	0.015	34	5
BH-07	474000	5450000	1	4	5	3	<0.3	2	<1	32	0.59	2	<8	<2	6	5	<0.5	<3	<3	2	0.01	0.011	24	5
BH-08	471755	5434893	1	5	28	30	<0.3	3	1	229	0.64	26	<8	<2	10	4	<0.5	<3	<3	<1	0.02	0.009	13	5
BH-09	471724	5434905	1	5	98	87	0.3	2	1	271	0.68	7	<8	<2	13	7	<0.5	<3	<3	2	0.04	0.020	25	5
BH-10	471570	5434988	158	35	2182	255	8.4	8	7	95	5.23	816	<8	<2	2	2	7.4	<3	9	79	0.04	0.018	4	77
BH-11	474000	5450000	671	18	498	235	3.6	7	8	25	5.29	508	<8	<2	2	3	2.8	<3	5	37	0.02	0.018	3	48
BH-12	474000	5450000	724	7	148	36	1.5	5	2	37	0.93	55	<8	<2	2	2	0.5	<3	4	3	0.04	0.006	3	11
BH-13	471642	5433951	21	14	26	12	2.8	3	1	37	0.98	30	<8	5	<2	1	<0.5	<3	263	2	0.01	0.007	2	9
BH-14	474000	5450000	5	5	7	5	0.4	4	1	34	0.81	479	<8	<2	<2	1	<0.5	<3	5	<1	<0.01	0.002	1	7
BH-15	474000	5450000	133	22	7	7	<0.3	4	1	90	1.19	4	<8	<2	13	20	<0.5	<3	<3	4	0.17	0.070	11	6
BH-16	474000	5450000	3	8	8	20	<0.3	14	4	281	1.32	22	<8	<2	6	2	<0.5	<3	<3	4	0.04	0.022	15	11
BH-17	471824	5434210	2	3	126	29	<0.3	7	1	260	0.70	13	<8	<2	8	4	<0.5	<3	<3	3	0.03	0.015	16	9
BH-18	471610	5434742	11	7	13	2	<0.3	12	15	41	2.47	6609	<8	<2	3	2	<0.5	5	<3	2	<0.01	0.008	7	10
BH-19	471610	5434742	4	11	41	21	0.3	5	2	53	1.92	52	<8	<2	10	6	<0.5	<3	3	7	0.01	0.020	34	11
BH-20	471584	5434391	3	12	4963	4	7.8	3	<1	38	1.17	44	<8	<2	<2	3	<0.5	<3	15	1	<0.01	0.004	1	9
BH-21	474000	5450000	5	9	92	16	6.1	9	1	149	1.43	4	<8	37	8	5	<0.5	3	>2000	10	0.05	0.026	17	17
BH-22	471652	5434400	27	6	44	4	4.9	4	<1	90	0.67	5	<8	32	3	2	<0.5	<3	>2000	4	0.11	0.051	9	9
BH-23	471642	5434369	279	119	158	188	2.1	57	32	444	7.38	55	26	<2	5	17	<0.5	<3	27	37	0.02	0.145	26	46
BH-24	471642	5434369	18	38	1118	52	18.1	9	2	65	2.51	2	<8	<2	5	8	<0.5	<3	39	11	0.01	0.020	13	18
BH-25	471642	5434369	141	24	33	71	1.4	5	2	73	3.29	250	<8	<2	7	24	<0.5	<3	5	3	0.04	0.099	9	7
BH-26	474000	5450000	1617	3	1961	3	4.8	3	1	29	1.88	187	<8	<2	<2	3	<0.5	3	5	3	0.01	0.025	1	7
BH-27	474000	5450000	19	4	20	2	0.8	2	<1	33	0.49	13	<8	<2	3	2	<0.5	<3	11	2	0.04	0.022	16	7
BH-28	472009	5434527	15	57	20	56	<0.3	37	17	928	3.23	<2	<8	<2	9	29	<0.5	<3	3	10	0.40	0.026	9	22
BH-29	474000	5450000	3	34	>9999	439	26.3	4	1	128	2.52	<2	<8	<2	4	14	3.4	<3	53	4	0.05	0.012	6	16
BH-30	474000	5450000	140	4	347	8	24.1	3	<1	34	0.40	<2	<8	4	<2	2	<0.5	<3	365	<1	0.03	0.017	2	7
BH-31	470910	5434809	5	9	148	109	0.6	6	1	35	0.71	24	<8	<2	11	5	<0.5	<3	6	1	0.01	0.013	13	7
BH-32	470910	5434809	2	2	10	3	<0.3	3	<1	50	0.27	2	<8	<2	9	4	<0.5	<3	6	1	0.03	0.012	11	5
BH-73	471678	5435466	<1	3	6	15	<0.3	2	<1	195	0.39	<2	<8	<2	5	3	<0.5	<3	<3	1	0.02	0.006	5	3
BH-74	471682	5435480	<1	1	14	17	<0.3	1	<1	325	0.42	<2	<8	<2	2	1	<0.5	<3	<3	1	0.01	0.008	8	4
BH-75	471638	5435512	3	20	117	32	0.6	1	4	109	1.83	11	<8	<2	13	8	<0.5	<3	<3	1	0.01	0.020	15	3
BH-76	474000	5450000	2	19	9	58	<0.3	49	14	1171	3.17	34	<8	<2	3	360	0.5	3	<3	17	5.53	0.091	5	17

Analysis: ACME ANALYTICAL LABORATORIES LTD. GROUP 1D - 0.50 GM, AU* IGNITED, ACID LEACHED, ANALYZED BY ICP-MS. (15 GM)

Appen

ID	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
BH-01	0.04	85	<0.01	8	0.32	0.05	0.16	<2	5.4
BH-02	0.10	116	0.01	<3	0.49	0.06	0.16	<2	5.6
BH-03	0.03	5	<0.01	<3	0.10	0.03	0.02	3	1.0
BH-04	0.04	78	<0.01	<3	0.38	0.04	0.21	<2	<0.2
BH-05	0.03	70	<0.01	<3	0.32	0.05	0.22	<2	89.8
BH-06	0.01	52	<0.01	4	0.26	0.07	0.16	<2	2.1
BH-07	0.01	49	<0.01	3	0.21	0.05	0.14	<2	1.2
BH-08	0.02	29	<0.01	22	0.22	0.04	0.09	<2	3.6
BH-09	0.02	62	<0.01	5	0.31	0.05	0.13	<2	1.6
BH-10	0.03	13	<0.01	<3	0.11	<0.01	0.02	6	594.5
BH-11	0.01	17	<0.01	<3	0.12	0.01	0.05	18	96.4
BH-12	0.01	18	<0.01	<3	0.09	0.01	0.04	7	30.2
BH-13	0.01	11	<0.01	<3	0.12	0.01	0.04	3	3652.0
BH-14	<0.01	4	<0.01	<3	0.01	<0.01	<0.01	3	42.7
BH-15	0.07	24	0.01	<3	0.69	0.08	0.07	2	13.7
BH-16	0.06	24	<0.01	<3	0.37	<0.01	0.18	<2	129.7
BH-17	0.03	31	<0.01	<3	0.26	0.03	0.10	2	1.2
BH-18	0.03	30	<0.01	<3	0.21	0.02	0.14	2	984.6
BH-19	0.12	63	0.01	<3	0.67	0.02	0.34	<2	3.5
BH-20	0.01	3	<0.01	<3	0.05	0.02	0.01	2	10.9
BH-21	0.20	47	0.03	3	0.65	0.03	0.33	2	36274.1
BH-22	0.07	8	0.01	<3	0.23	0.02	0.06	2	29896.6
BH-23	0.16	88	0.01	3	1.10	0.02	0.20	4	187.7
BH-24	0.10	38	0.01	<3	0.45	0.02	0.16	2	128.7
BH-25	0.02	59	<0.01	<3	0.44	0.06	0.13	3	40.5
BH-26	0.01	28	<0.01	17	0.30	0.01	0.21	10	85.9
BH-27	0.01	12	<0.01	5	0.11	0.01	0.06	>200	147.3
BH-28	0.54	35	0.01	<3	0.96	0.03	0.13	6	10.2
BH-29	0.04	25	<0.01	<3	0.27	0.03	0.08	5	26.0
BH-30	0.01	4	<0.01	<3	0.05	0.01	0.03	5	2158.2
BH-31	0.01	24	<0.01	6	0.27	0.06	0.12	2	22.0
BH-32	0.04	17	<0.01	20	0.17	0.06	0.09	<2	6.2
BH-73	0.02	29	<0.01	<3	0.12	0.02	0.06	<2	0.5
BH-74	0.01	28	<0.01	<3	0.07	<0.01	0.03	<2	0.7
BH-75	0.02	165	<0.01	<3	0.30	0.03	0.12	<2	1.4
BH-76	2.12	84	<0.01	<3	0.74	0.01	0.22	<2	3.1

Analysi

Appendix B: Assay results of samples collected from the Lefevre Trenches (see Figure 4B for sample locations).

Element	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti
Sample	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%
LS-1	7	80	6	13	1.3	13	8	3444	2.61	56	< 8	3	4	8	< .5	< 3	117	13	0.58	0.083	14	16	0.23	10	0.04
LS-2	13	45	10	2	1	4	2	123	2.82	139	< 8	4	< 2	2	< .5	< 3	689	3	0.01	0.012	4	6	0.01	8	< .01
LS-3	4	222	< 3	2	0.3	4	1	63	0.86	13	< 8	< 2	< 2	1	< .5	< 3	13	1	0.01	0.002	1	11	< .01	2	< .01
LS-4	17	50	5	102	0.4	20	7	5687	3.91	14	< 8	< 2	12	99	0.7	< 3	19	26	3.68	0.07	31	40	0.66	50	0.11
LS-5	1	49	281	25	6.8	35	95	435	5.6	3054	< 8	< 2	7	5	< .5	< 3	18	5	0.08	0.037	9	10	0.1	14	0.01
LS-6	10	51	3	293	0.4	19	9	5782	2.52	20	< 8	< 2	13	53	3.1	< 3	< 3	22	7.34	0.07	19	18	0.3	7	0.09
LS-7	2	93	5	62	0.6	20	7	8055	5.56	54	< 8	< 2	11	36	0.7	< 3	76	28	2.18	0.056	26	42	0.68	21	0.11
LS-8	9	109	< 3	63	0.4	30	11	4534	7.01	16	< 8	< 2	15	67	< .5	< 3	71	38	1.15	0.071	40	71	1.48	71	0.18
LS-9	4	100	368	10	62	19	357	384	9.18	>9999	< 8	12	5	26	< .5	12	746	10	0.08	0.037	21	10	0.05	19	0.01
LS-10	2	188	5	3	1.7	39	23	198	5.39	317	< 8	5	< 2	3	< .5	< 3	519	1	0.11	0.006	1	5	0.01	2	< .01
RE LS-10	2	182	5	3	1.5	38	22	190	5.28	281	< 8	6	< 2	3	< .5	< 3	496	1	0.11	0.006	1	5	0.01	< 1	< .01
LS-11	42	3	5	21	2	35	422	2766	8.26	>9999	< 8	5	8	25	< .5	< 3	485	18	1.77	0.042	25	36	0.55	21	0.02
LS-12	2	237	6	2	2.9	43	40	237	10.71	450	< 8	13	< 2	2	< .5	< 3	1447	1	0.05	0.002	1	4	0.01	2	< .01
LS-13	142	170	< 3	28	1	12	8	3856	15.83	25	< 8	< 2	9	22	< .5	< 3	108	38	0.49	0.071	19	51	0.8	56	0.15
LS-14	62	294	< 3	56	0.9	35	34	4267	11.61	33	< 8	< 2	13	17	0.5	< 3	93	48	0.92	0.074	39	58	1.2	43	0.14
LS-15	108	284	5	39	1.1	42	41	4686	13.75	24	< 8	< 2	10	22	0.8	< 3	129	39	0.73	0.053	36	53	0.96	37	0.14
LS-16	10	96	3	24	< .3	9	2	627	4.24	12	< 8	< 2	5	22	< .5	< 3	4	19	0.08	0.03	6	29	0.42	23	0.04
LS-17	36	276	7	19	1.1	57	49	4668	8.56	11	14	< 2	6	15	0.5	< 3	76	40	1	0.157	12	21	0.35	22	0.06
Standard	7	129	31	159	0.4	34	11	794	3.14	24	9	< 2	4	27	5.3	5	5	76	0.53	0.09	17	171	0.6	145	0.09

Samples LS-1 to LS-17: Au* ignited, acid leached and analysed by ICP-MS. (15 gm)
From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

Appendix]

Element	B	Al	Na	K	W	Au*
Sample	ppm	%	%	%	ppm	ppb
LS-1	< 3	0.69	0.02	0.14	196	3387.1
LS-2	4	0.11	0.01	0.05	94	10225.8
LS-3	< 3	0.02	0.01	0.01	79	427.2
LS-4	< 3	2.27	0.09	0.35	133	195.8
LS-5	39	0.47	0.01	0.08	24	330.3
LS-6	< 3	1.46	0.05	0.04	87	24.5
LS-7	< 3	2.22	0.07	0.46	193	785.2
LS-8	< 3	2.93	0.11	1.32	192	976.4
LS-9	9	0.44	0.03	0.11	>200	11901.9
LS-10	< 3	0.03	0.02	0.01	69	5904.4
RE LS-10	< 3	0.03	0.03	0.01	63	5829.9
LS-11	8	1.18	0.02	0.27	>200	5882.6
LS-12	< 3	0.04	0.01	0.01	76	14079.2
LS-13	< 3	1.52	0.05	1.14	>200	1582
LS-14	< 3	2.04	0.06	1.25	>200	980
LS-15	< 3	1.94	0.08	1.03	>200	1542.3
LS-16	< 3	1.15	0.04	0.24	6	101.2
LS-17	4	1.19	0.04	0.39	>200	1110.2
Standard	< 3	1.78	0.03	0.15	2	457.5

Samples LS-1
From ACME

(21) CONSENT OF AUTHOR

To: British Columbia Securities Commission.

I, Gerald Edwin RAY, do hereby consent to the filing, with the regulatory authorities referred to above, of the technical report titled ""THE GEOLOGY & MINERAL POTENTIAL OF THE CLY1 and 2 CLAIMS, southeastern British Columbia, Canada" and dated the 25th September 2004 and to the written disclosure of this report and of extracts from or a summary of this report in the written disclosure in the Annual Information Report of Kootenay Gold Corp being filed.

I also certify that I have read the written disclosure being filed and I do not have any reason to believe that there are any misrepresentations in the information derived from the Technical Report or that the written disclosure in the Annual Information Report of Kootenay Gold Corp contains any misrepresentation of the information contained in the Technical Report.

Dated this 25th September 2004.

Signature of Qualified Person

Print name of Qualified Person **Seal of Qualified Person**

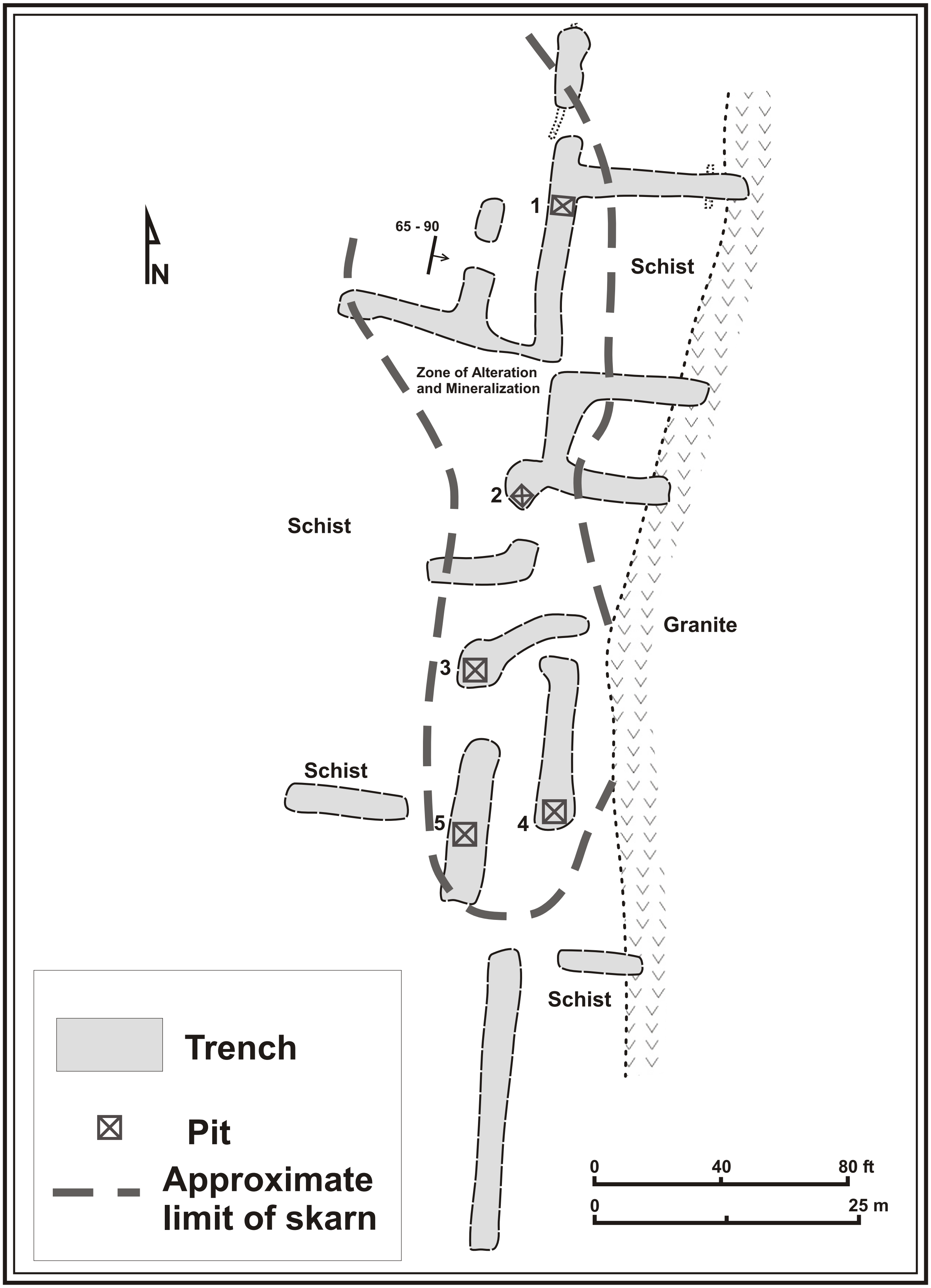


Fig 4A. Geology of the Lefevre skarn area showing distribution of trenches and pits. After Hedley, 1943).

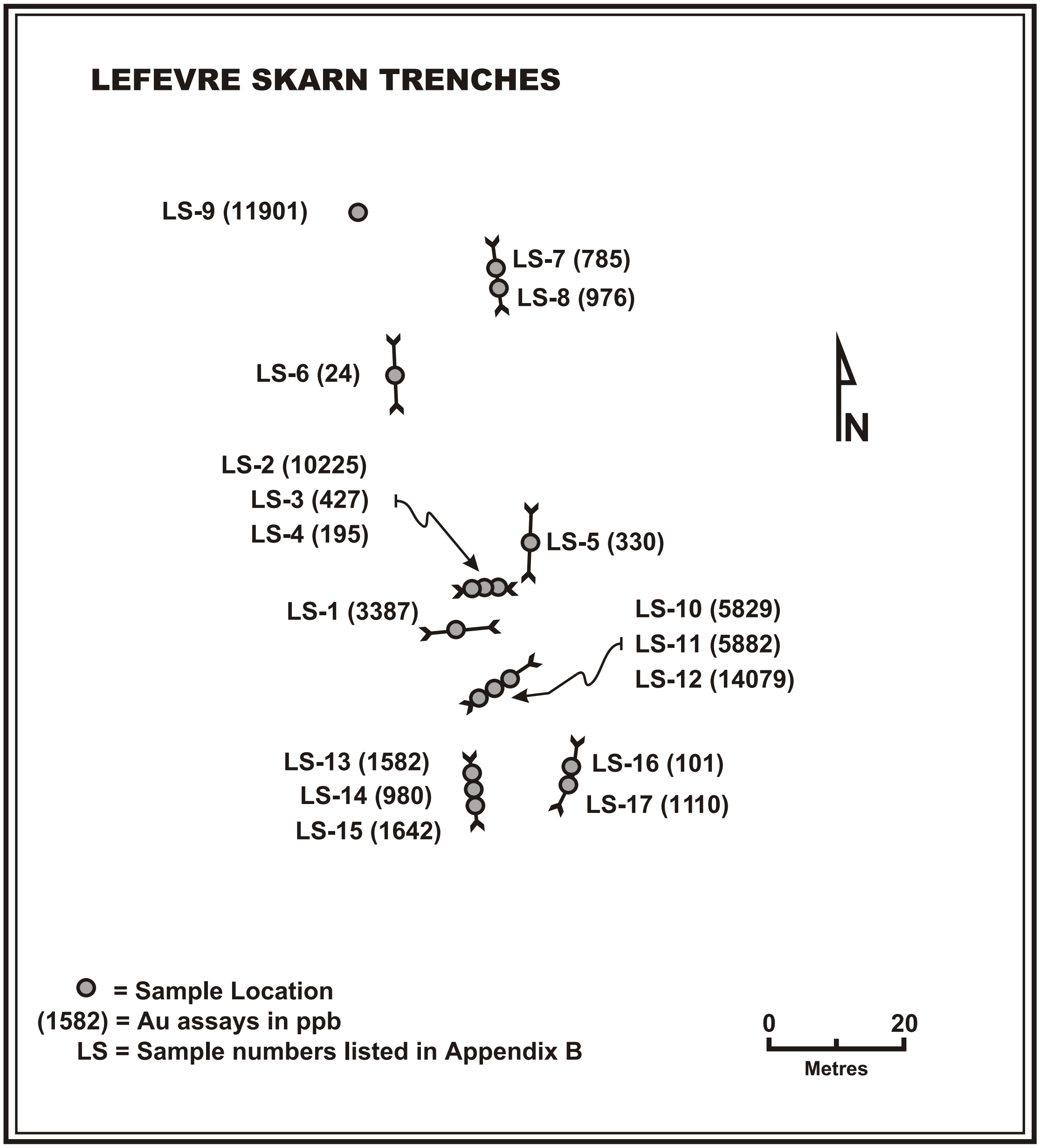


Fig. 4B: Location of samples collected by Tom and Craig Kennedy in the Lefevre Trenches. (See Appendix B).

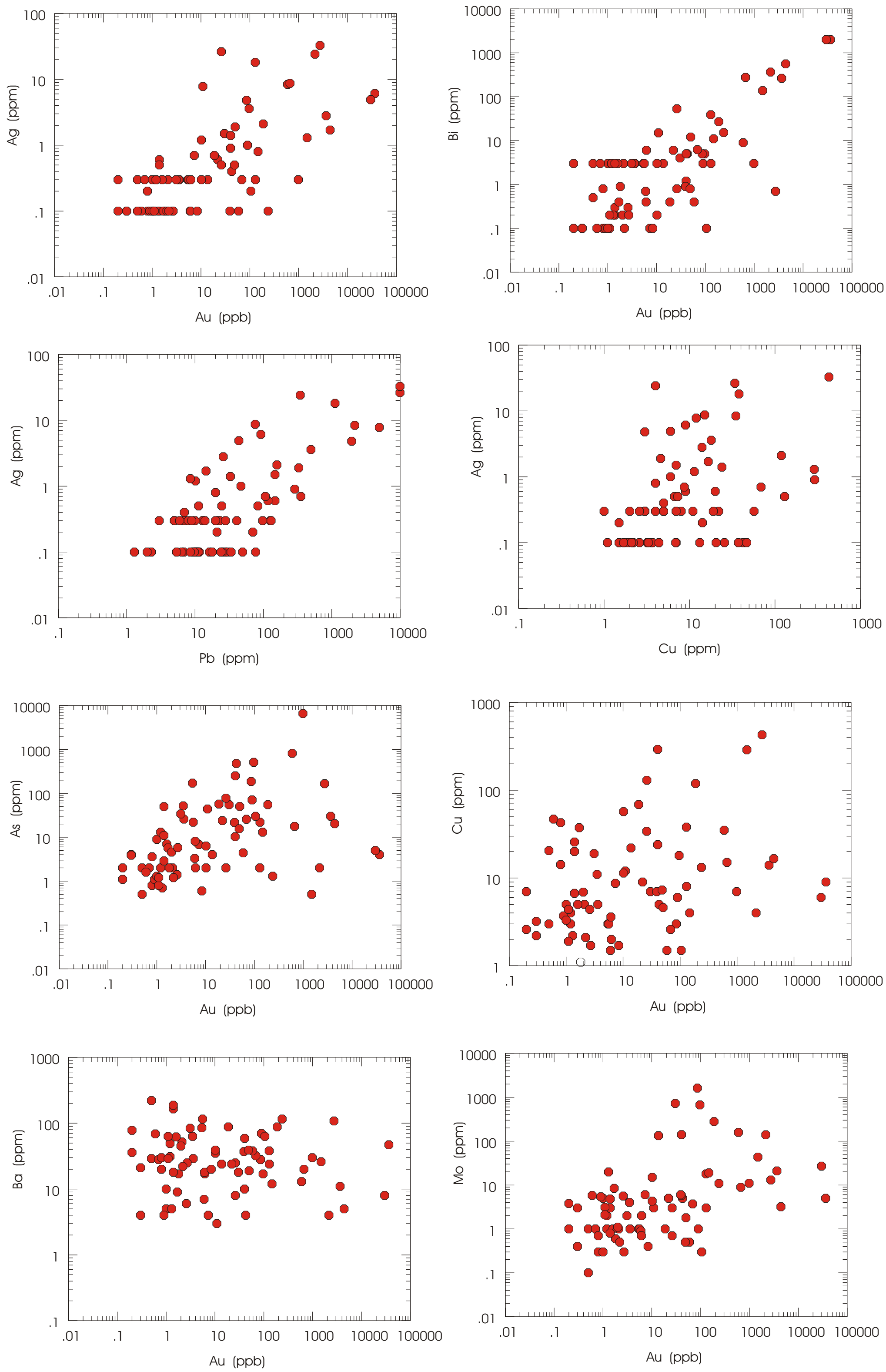


Fig. 5: Binary plots of assay data on the Bunker Hill claims; samples collected by T. & C. Kennedy.

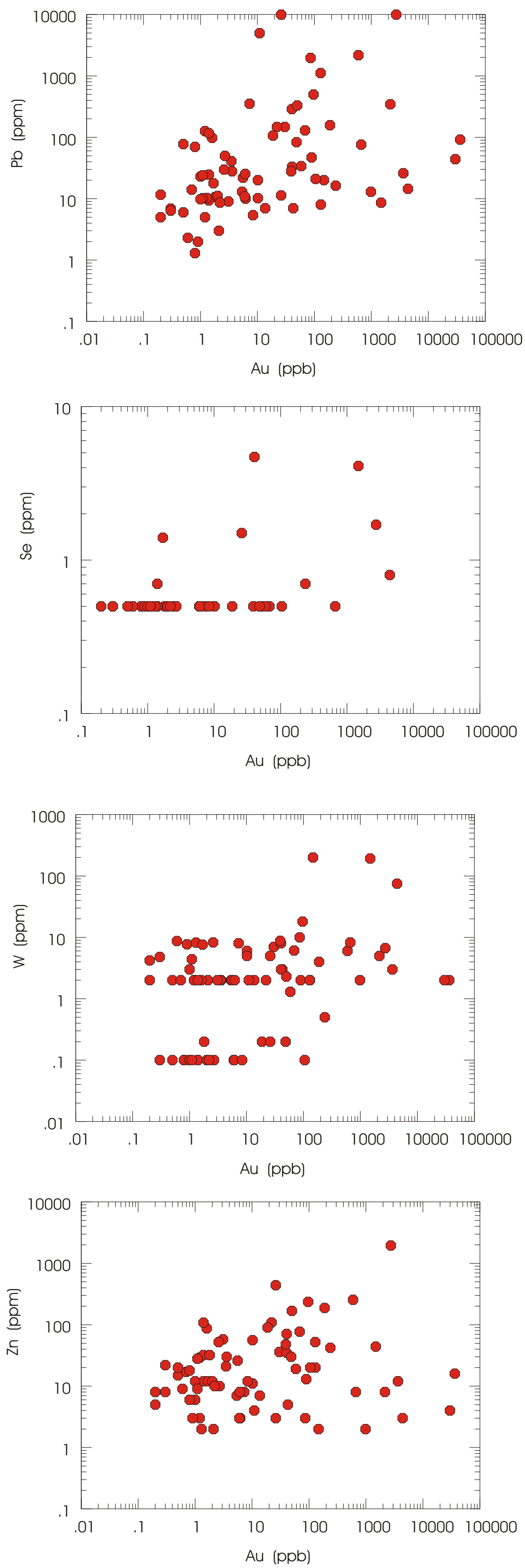


Fig. 5 contd: Binary plots of assay data on the Bunker Hill claims; samples collected by T. & C. Kennedy.

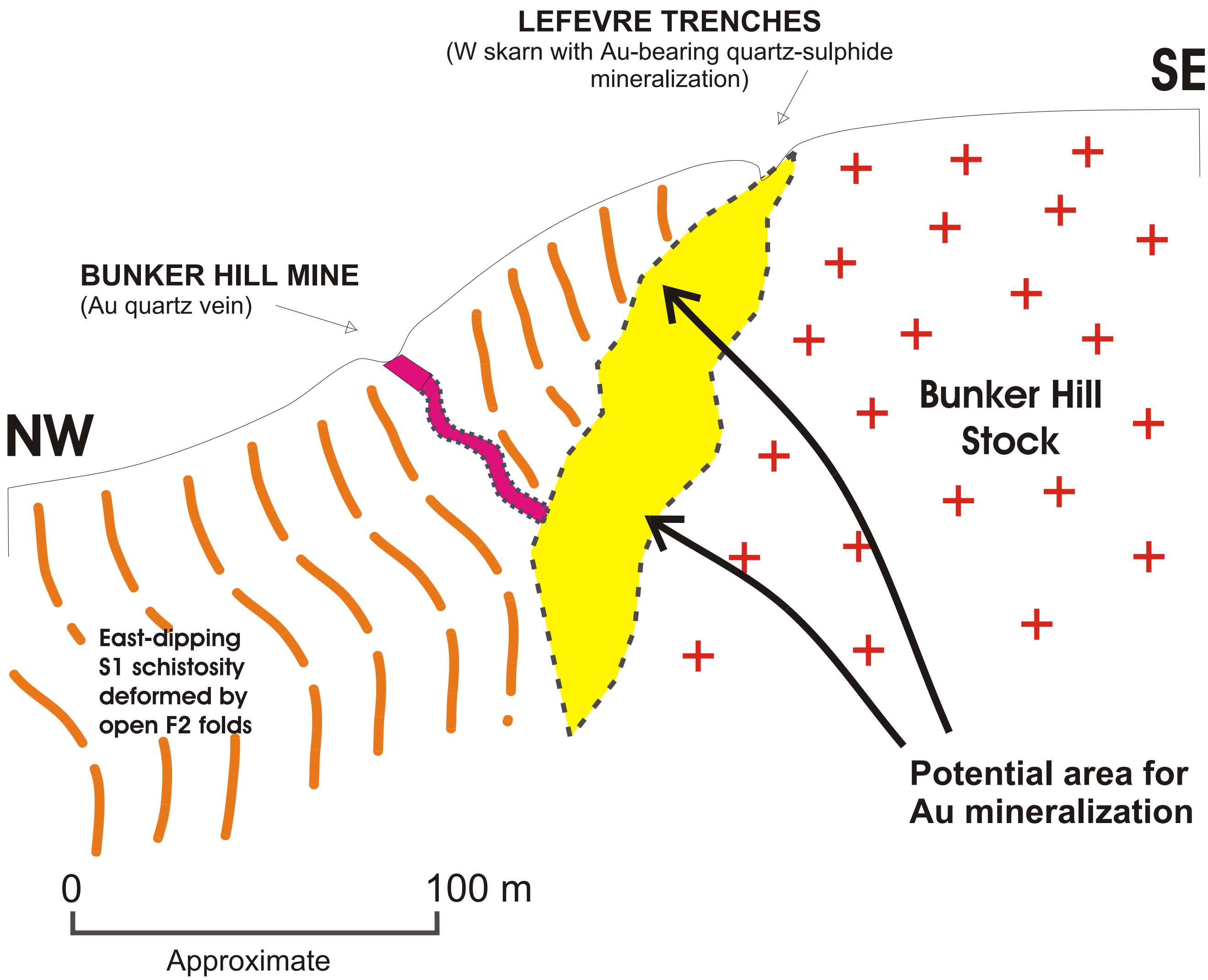
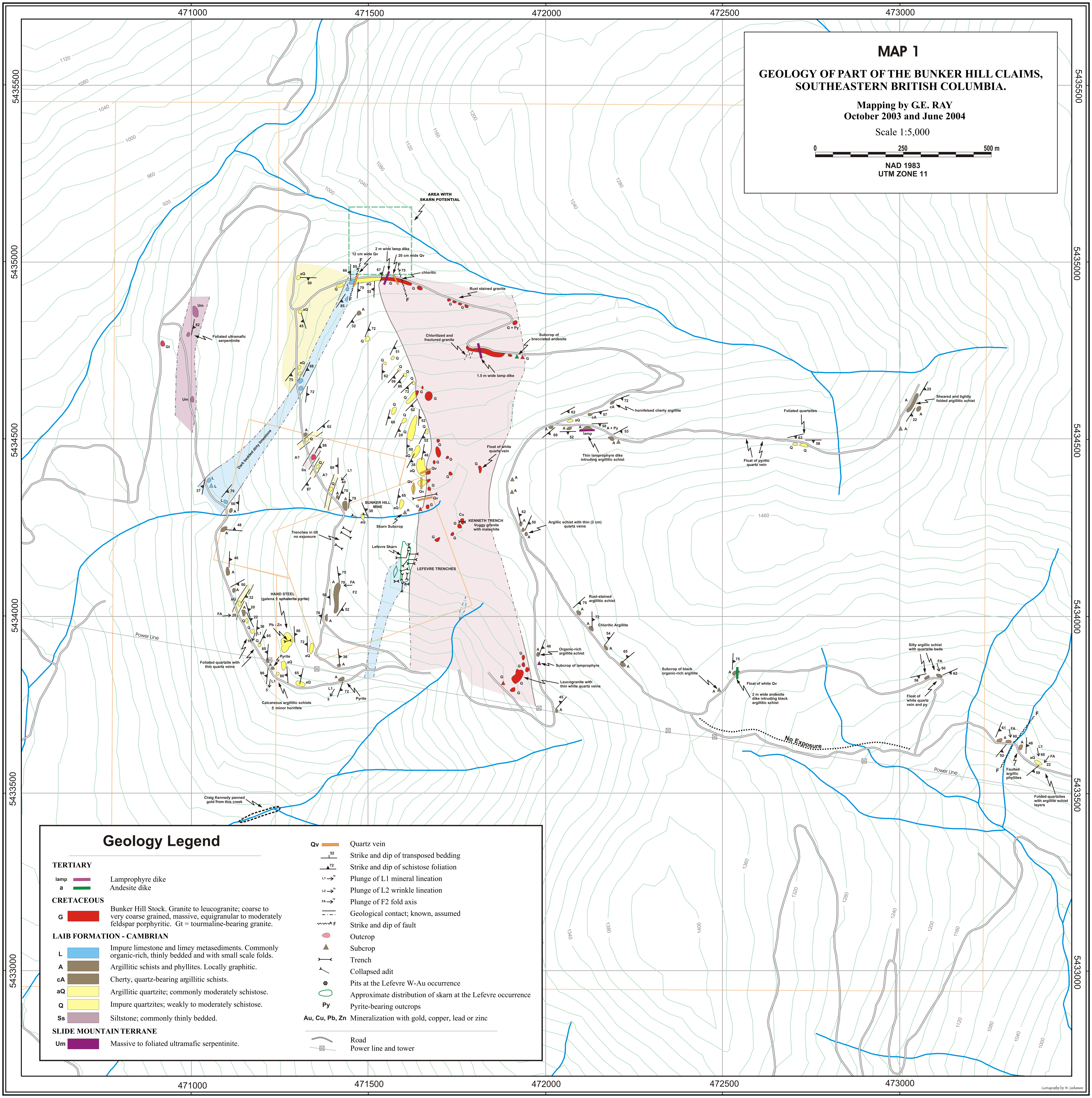
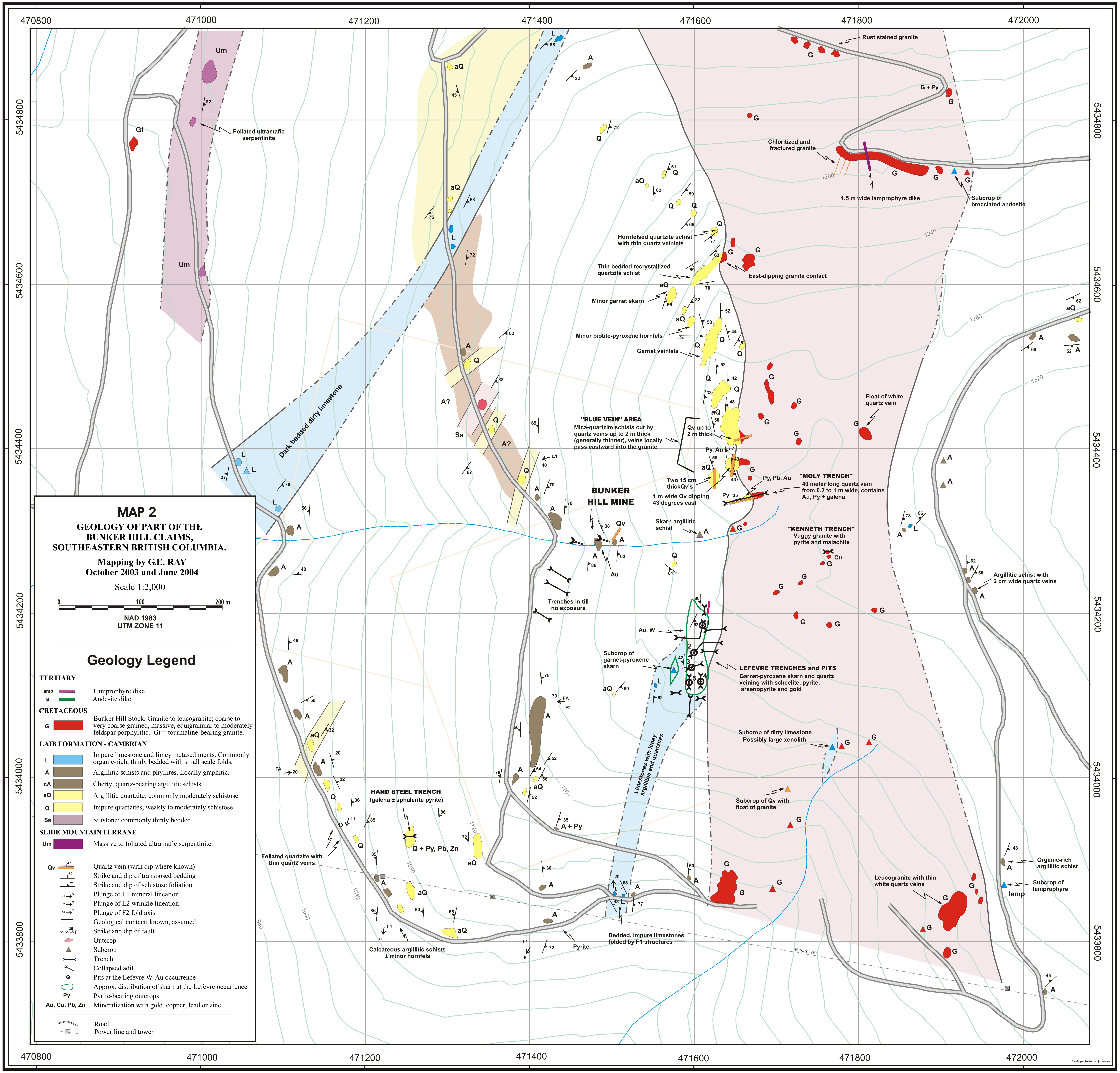


Fig. 6: NW-SE sketch section from the Bunker Hill Mine to the Lefevre skarn trenches. (G.E. Ray).



MAP 1
GEOLOGY OF PART OF THE BUNKER HILL CLAIMS, SOUTHEASTERN BRITISH COLUMBIA.
Mapping by G.E. RAY
October 2003 and June 2004
Scale 1:5,000
0 250 500 m
NAD 1983
UTM ZONE 11
471000
471500
472000
472500
473000
5435500
5435000
5434500
5434000
5433500
5433000
AREA WITH SKARN POTENTIAL
2 m wide lamp dike
12 cm wide Qv
20 cm wide Qv
chloritic
Rust stained granite
Chloritized and fractured granite
Subcrop of brecciated andesite
1.5 m wide lamp dike
Foliated ultramafic serpentinite
Dark bedded dirty limestone
hornfelsed cherty argillite
Thin lamprophyre dike intruding argillitic schist
Float of white quartz vein
Foliated quartzites
Float of pyritic quartz vein
Sheared and tightly folded argillitic schist
BUNKER HILL MINE
Skarn Subcrop
KENNETH TRENCH
Vuggy granite with malachite
Argillic schist with thin (2 cm) quartz veins
Trenches in till no exposure
Lefevre Skarn
LEFEVRE TRENCHES
HAND STEEL (galena ± sphalerite pyrite)
Rust-stained argillitic schist
Chloritic Argillite
Organic-rich argillite schist
Subcrop of lamprophyre
Leucogranite with thin white quartz veins
Foliated quartzite with thin quartz veins
Calcareous argillitic schists ± minor hornfels
Power Line
Subcrop of black organic-rich argillite
Float of white Qv
2 m wide andesite dike intruding black argillitic schist
Silty argillic schist with quartzite beds
Float of white quartz vein and py
No Exposure
Faulted argillic phyllites
Folded quartzites with argillite schist layers
Craig Kennedy panned gold from this creek
Geology Legend
TERTIARY
lamp Lamprophyre dike
a Andesite dike
CRETACEOUS
G Bunker Hill Stock. Granite to leucogranite; coarse to very coarse grained, massive, equigranular to moderately feldspar porphyritic. Gt = tourmaline-bearing granite.
LAIB FORMATION - CAMBRIAN
L Impure limestone and limey metasediments. Commonly organic-rich, thinly bedded and with small scale folds.
A Argillitic schists and phyllites. Locally graphitic.
cA Cherty, quartz-bearing argillitic schists.
aQ Argillitic quartzite; commonly moderately schistose.
Q Impure quartzites; weakly to moderately schistose.
Ss Siltstone; commonly thinly bedded.
SLIDE MOUNTAIN TERRANE
Um Massive to foliated ultramafic serpentinite.
Qv Quartz vein
Strike and dip of transposed bedding
Strike and dip of schistose foliation
Plunge of L1 mineral lineation
Plunge of L2 wrinkle lineation
Plunge of F2 fold axis
Geological contact; known, assumed
Strike and dip of fault
Outcrop
Subcrop
Trench
Collapsed adit
Pits at the Lefevre W-Au occurrence
Approximate distribution of skarn at the Lefevre occurrence
Py Pyrite-bearing outcrops
Au, Cu, Pb, Zn Mineralization with gold, copper, lead or zinc
Road
Power line and tower
Cartography by W. Jackaman


MAP 2
GEOLOGY OF PART OF THE BUNKER HILL CLAIMS, SOUTHEASTERN BRITISH COLUMBIA.
Mapping by G.E. RAY
October 2003 and June 2004
Scale 1:2,000
0 100 200 m
NAD 1983
UTM ZONE 11
Geology Legend
TERTIARY
lamp Lamprophyre dike
a Andesite dike
CRETACEOUS
G Bunker Hill Stock. Granite to leucogranite; coarse to very coarse grained, massive, equigranular to moderately feldspar porphyritic. Gt = tourmaline-bearing granite.
LAIB FORMATION - CAMBRIAN
L Impure limestone and limey metasediments. Commonly organic-rich, thinly bedded with small scale folds.
A Argillitic schists and phyllites. Locally graphitic.
cA Cherty, quartz-bearing argillitic schists.
aQ Argillitic quartzite; commonly moderately schistose.
Q Impure quartzites; weakly to moderately schistose.
Ss Siltstone; commonly thinly bedded.
SLIDE MOUNTAIN TERRANE
Um Massive to foliated ultramafic serpentinite.
Qv Quartz vein (with dip where known)
Strike and dip of transposed bedding
Strike and dip of schistose foliation
Plunge of L1 mineral lineation
Plunge of L2 wrinkle lineation
Plunge of F2 fold axis
Geological contact; known, assumed
Strike and dip of fault
Outcrop
Subcrop
Trench
Collapsed adit
Pits at the Lefevre W-Au occurrence
Approx. distribution of skarn at the Lefevre occurrence
Py Pyrite-bearing outcrops
Au, Cu, Pb, Zn Mineralization with gold, copper, lead or zinc
Road
Power line and tower
470800
471000
471200
471400
471600
471800
472000
5434800
5434600
5434400
5434200
5434000
5433800
BUNKER HILL MINE
Rust stained granite
Foliated ultramafic serpentinite
Chloritized and fractured granite
1.5 m wide lamprophyre dike
Subcrop of brecciated andesite
Hornfelsed quartzite schist with thin quartz veinlets
Thin bedded recrystallized quartzite schist
East-dipping granite contact
Minor garnet skarn
Minor biotite-pyroxene hornfels
Garnet veinlets
Dark bedded dirty limestone
Float of white quartz vein
"BLUE VEIN" AREA
Mica-quartzite schists cut by quartz veins up to 2 m thick (generally thinner), veins locally pass eastward into the granite
Qv up to 2 m thick
Two 15 cm thick Qv's
1 m wide Qv dipping 43 degrees east
"MOLY TRENCH"
40 meter long quartz vein from 0.2 to 1 m wide, contains Au, Py + galena
Skarn argillitic schist
"KENNETH TRENCH"
Vuggy granite with pyrite and malachite
Argillitic schist with 2 cm wide quartz veins
Trenches in till no exposure
Subcrop of garnet-pyroxene skarn
LEFEVRE TRENCHES and PITS
Garnet-pyroxene skarn and quartz veining with scheelite, pyrite, arsenopyrite and gold
Subcrop of dirty limestone Possibly large xenolith
Limestones with limey argillites and quartzites
Subcrop of Qv with float of granite
HAND STEEL TRENCH
(galena ± sphalerite pyrite)
Q + Py, Pb, Zn
Foliated quartzite with thin quartz veins
Organic-rich argillitic schist
Subcrop of lamprophyre
Leucogranite with thin white quartz veins
Bedded, impure limestones folded by F1 structures
Calcareous argillitic schists ± minor hornfels
Pyrite
Power Line
Cartography by W. Jackaman