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# GEOLOGICAL AND PROSPECTING REPORT

on the

## PYKETT CREEK PROPERTY

(Josh, Danielle & Heather Mineral Claims)  
(Tenure No. 337360, 337361 & 346760)

Ashlu Valley Area, Squamish/Whistler Region  
N.T.S. 92G/14W, Lat. 49°57'30" Long. 120°26'10"  
Vancouver Mining Division

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Gold Commissioner's Office  
VANCOUVER, B.C.

Owned by  
D.E. Morneau  
1352 Oriole Ave.,  
Port Coquitlam, B.C.  
V3B 5H6

FILMED

Prepared by

**J.T. SHEARER, M.Sc., P.Geo.**  
**HOMEGOLD RESOURCES LTD.**

#5-2330 Tyner St  
Port Coquitlam, BC  
V3C 2Z1

Phone/Fax: 604-944-6102

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Fieldwork Completed between June 15, 1996 and July 1, 1996.

24,563

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

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## **SUMMARY**

1. The Josh, Danielle & Heather Mineral Claims were located in 1995 & 1996 to cover reported gold-bearing quartz vein occurrences near Pykett Creek which are found in similar geological environment as the nearby Ashlu Gold Mine on Roaring Creek.
2. This reported vein near Pykett Creek was not found in the present program. Previous sampling gave results up to 0.8 oz/ton
3. Prospecting in 1996 suggests that the vein is perhaps located north of the mainline logging road or now covered by a slide of overburden south of the road nearer Ashlu Creek and the junction of Coin Creek.
4. A suite of 13 rocks were previously collected from underground workings at the Ashlu Gold Mine. Two samples were examined for sulfide mineralogy in reflected light and 12 were studied in regard to silicate mineral assemblages by transmitted light. This information is reproduced here because of the similarities in geological setting.
5. Several distinct gold associations were noted at the Ashlu Mine:
  - a) large "inclusions: in pyrite, grain size to 0.1 mm
  - b) small blobs in chalcopyrite, grain sizes less than 10 microns
  - c) free grains along fractures in quartz, grain size to 40 microns
  - d) along pyrite - quartz boundaries, averaging 50 microns
  - e) along fractures in pyrite, grains size to 35 microns
6. The tellurides, sylvanite and probably tellurbismuth occur as small grains in euhedral pyrite crystals adjacent to the ore zone.
7. The main host rock of the quartz vein system is biotite granodiorite with minor hornblende, 10-20% potassium feldspars and a plagioclase composition of about An<sub>60</sub>. Similar rocks were noted during prospecting on the Josh Claim.
8. An important result of this petrographic study is the indication that the dark mafic rich rock associated with the quartz vein system, which has in the past been called a dyke, is more likely to be a Phyllonite caused by cataclastic deformation due to movement along a major fault. The dark colour is a product of biotite overprinting on altered granodiorite which has undergone grain size reduction.
9. This petrographic work provides the basis for detail geological mapping and correlation by establishing proper rock names and genetic information about representative specimens. Lithotheque library boards have been constructed from the petrographic suite to ensure continuity of work between personnel changes.
10. A two phase program of geological mapping, prospecting, geochemistry, and contingent trenching and diamond drilling is recommended to further evaluate the claim block

## INTRODUCTION

The Pykett Creek Property which is 2.5 km northwest of the Ashlu Gold Mine, a former producer during the 1920's and 1930's, was located in 1995 and 1996 to cover a Minfile gold occurrence. Mining in the past at the Ashlu Gold Mine was mainly by narrow stopes above 1200 level. Economic mineralization is contained in a quartz veining associated with a narrow zone of dark, mafic rich, fine grained altered rock which is enclosed by coarse-grained granodiorite. A trackless decline was collared in November 1983. Milling on a limited scale began early in 1984 using a newly constructed 100 tons per day facility, but was quickly shut down for an apparent shortage of ore. The mine was briefly optioned to Tanquille Resources in 1988 (Mazacek 1988) but legal problems curtailed work. A similar vein on the Ashlu #2 claim near Pokosha Creek which may be much more extensive than formerly known (Shearer 1995).

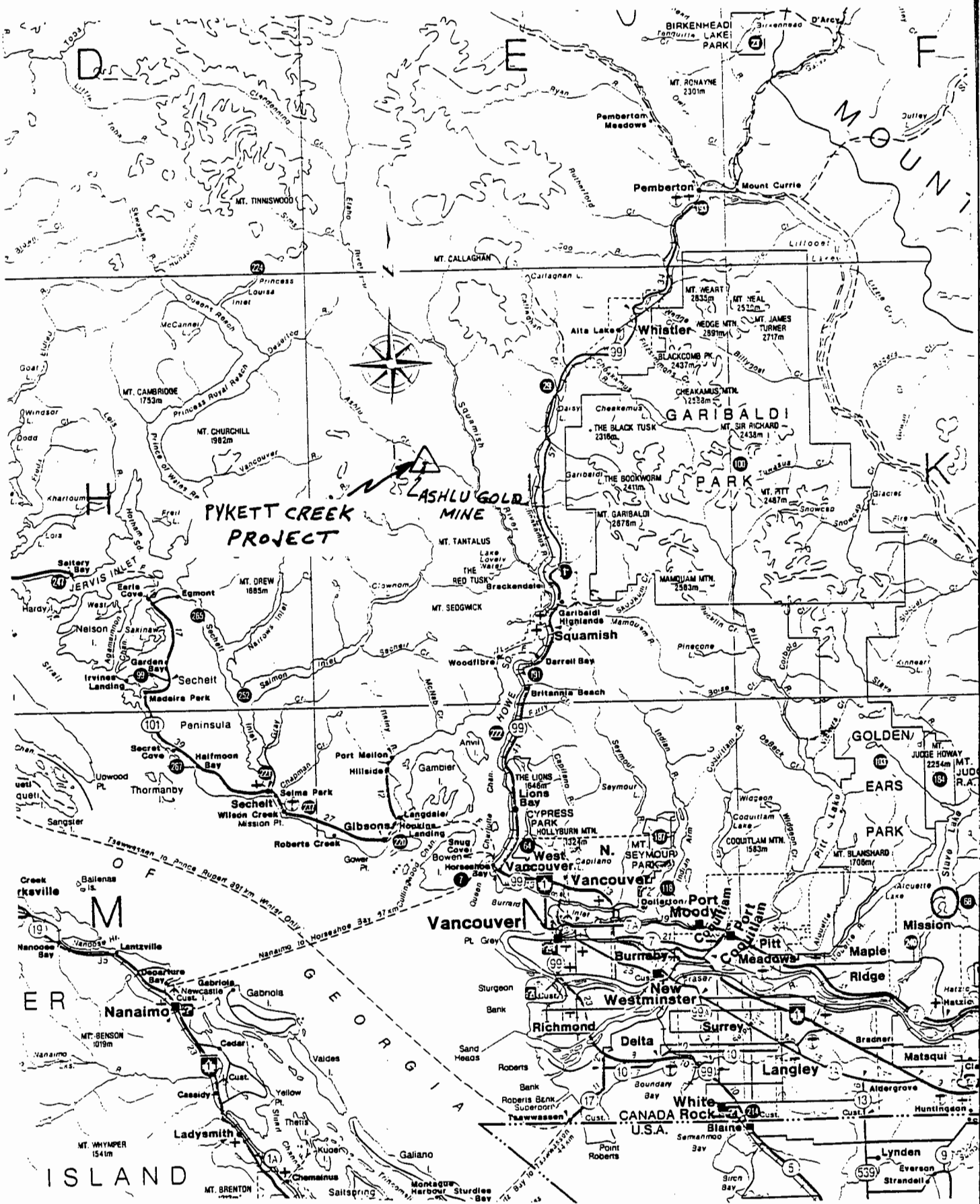
This report summarizes the petrographic characteristics of the ore and host rocks and an initial assessment of the surrounding Pykett Creek claims for similar occurrences of gold mineralization like the Ashlu Mine. Future exploration guidelines must be based on an accurate knowledge of major rock types and their relationships to each other. The specimen suite from the Ashlu Gold Mine was collected by R.K. Burton and J.T. Shearer in 1984 from underground workings. No field mapping was done in conjunction with this petrographic study until prospecting and mapping was completed on the adjacent Ashlu 1-5 and Pykett Creek claims.

Objectives of the microscopic examinations are:

- (1) define proper rock names
- (2) quantify alteration types and apply alteration patterns to exploration
- (3) give all persons concerned with geology of the property a common vocabulary and understanding of rock definitions
- (4) outline ore mineralogy (to help mill recoveries)

A series of **Lithotheque** boards have been established to provide continuity between personnel changes and maintain uniform rock names throughout future work at the mine. The **Lithotheque** collection should be housed in a small cabinet located in the core shack or engineering office and used as a reference suite. Additional lithotheque plates will probably be necessary to correlate surface rock types to subsurface data from drill holes and underground workings.

The recommendations contained in this report are simply general guidelines for future exploration. A comprehensive program of mapping is needed to arrive at a synthesis of all data necessary for a successful exploration program to be designed.



**ASHLU GOLD MINE**

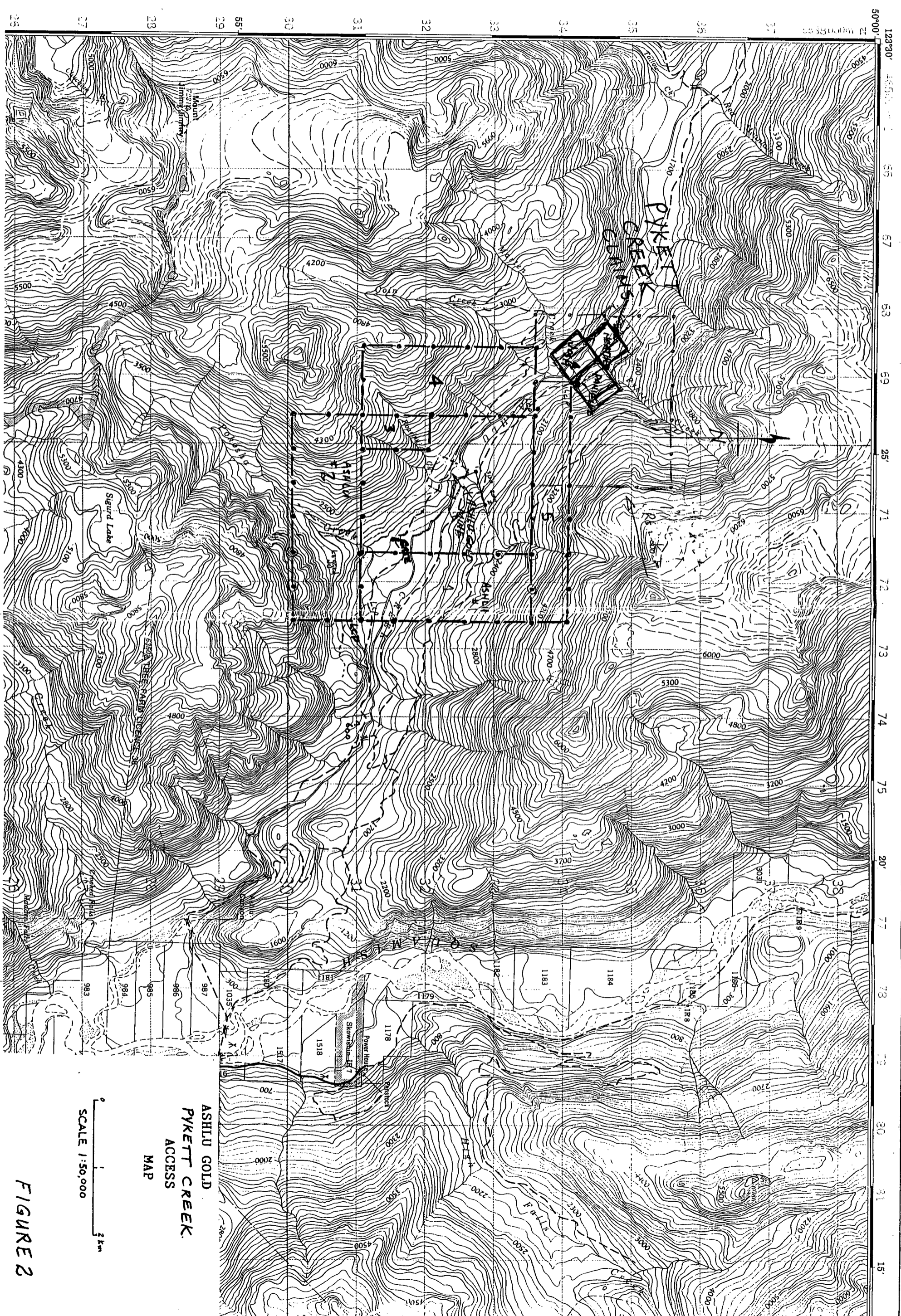
**LOCATION MAP**  
**FIGURE 1**

## **LOCATION AND ACCESS**

The Pykett Creek Property is reached by a partially paved road extending along the Squamish River to Ashlu Creek. A well maintained logging road has been constructed up the Ashlu Valley, close to the creek (Figure 1 and 2). The Ashlu Creek turn-off is approximately 32 km north of Squamish. Squamish is reached via Highway 99 and is 65 km by road from downtown Vancouver. The Ashlu Gold mine site is 12 km northwest of the junction of Ashlu Creek and Squamish River on branch road A-600. The junction of road A-600 and the mainline is just past the "25 mile" sign. There is a nominal 100 tons per day flotation mill at the Ashlu Gold Minesite. The Pykett Creek claims are situated at Pykett Creek between the 29 and 30 mile signs.

The main workings of the Ashlu Mine are on a relatively steep north-facing slope with the Golden Coin Adit at 1350' (412 meters) elevation. Plotted (Minfile) showings at Pykett Creek are along the Main Ashlu Creek. Much of the merchantable timber in the valley has been harvested in recent years. The main logging road is often kept locked after hours.

A new 1:20,000 scale base map showing topography and roads from the Ministry of Forests was enlarged to 1:5,000 was used as a base for geological and prospecting activities.



ASHLU GOLD  
 PYKETT CREEK  
 ACCESS  
 MAP

SCALE 1:50,000

FIGURE 2



## CLAIM STATUS

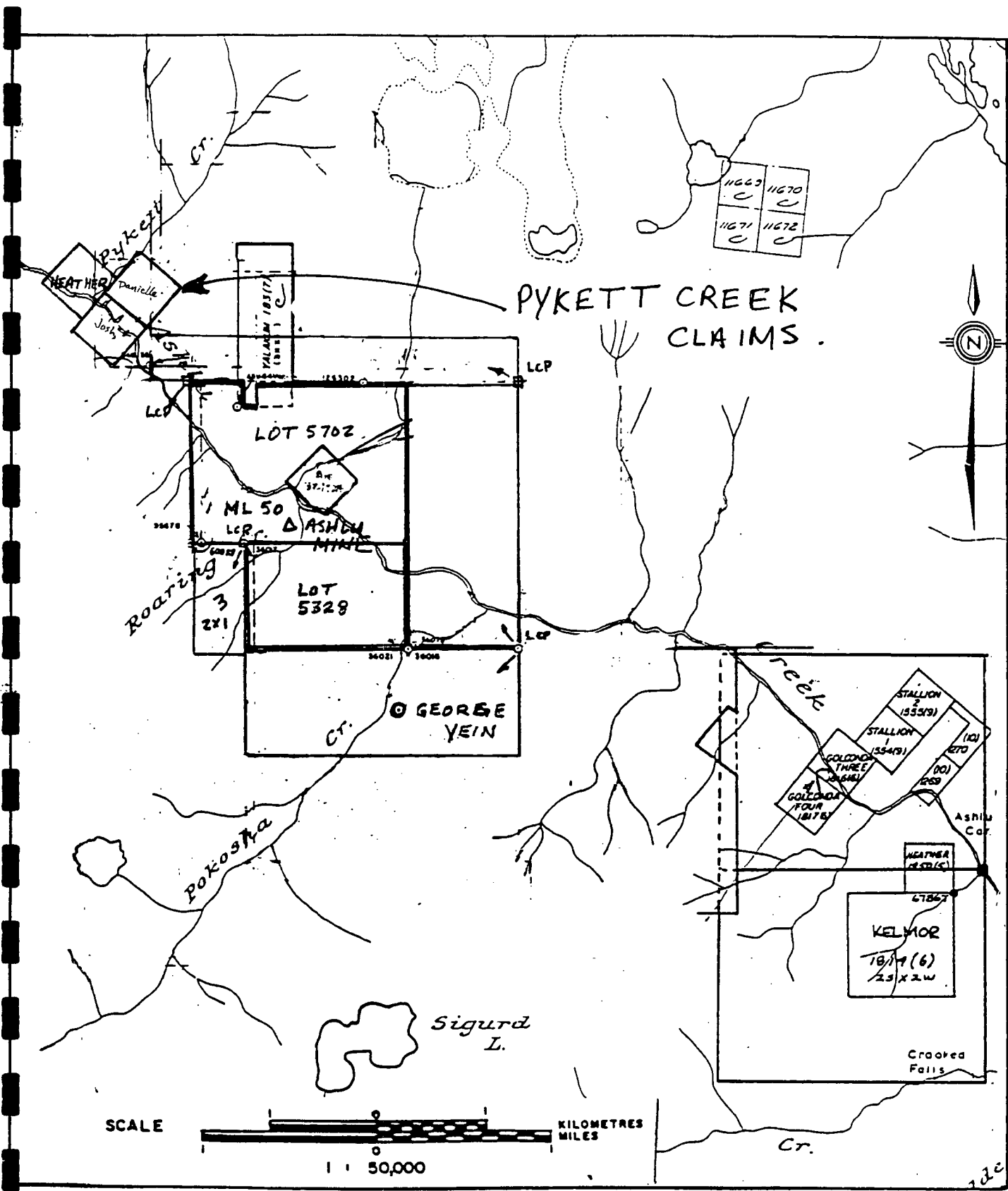
The Pykett Creek Property consists of the Josh, Danielle and Heather two-post mineral claims as shown in Table 1 and Figure 3.

**TABLE 1  
LIST OF CLAIMS**

<b>Claim Name</b>	<b>Tenure Number</b>	<b>Number of Units</b>	<b>Size</b>	<b>Location Date</b>	<b>*Current Expiry Date</b>
Josh	337360	1	2 post	July 5, 1995	July 5, 2001
Danielle	337361	1	2 post	July 5, 1995	July 5, 2001
Heather	346760	1	2 post	June 12, 1996	June 12, 2001
	Total	3 units			

\* with application of Assessment work documented in this report.

Mineral tenure in British Columbia is governed under the Mineral Act and regulations which require \$100.00 in approved assessment work in each of the first three years and \$200 per year of work in each subsequent year per unit of mineral claim to maintain title.



# CLAIM MAP

Vancouver Mining Division- British Columbia

## HISTORY

Historical notes are taken from B.C. Minister of Mines Annual Reports (MMAR) as listed in the references. The Ashlu quartz veins were discovered in 1923 by Fred Pykett and associates who originally called the claims the Golden King Group. Over 100 feet of underground workings were reported in 1924. Transportation was initially somewhat difficult due to the steep-walled box canyon of Ashlu Creek. A 6 mile pack trail connected the mine with the Squamish River. The trail had to be constructed back from the creek along high subalpine meadows.

Early assays indicated significant gold in both surface and underground samples. Sulfide rich specimens gave results up to 5.44 oz/ton gold, (MMAR 1924, Page 242).

By 1930, the claims were known as the Golden Coin Group, owned by the Pykett Estate, C. Anderson, and R.V. Carson. Close spaced sampling in the Golden Coin adit (1350 level) showed gold being concentrated with "pyrites" in definite shoots.

B.T. O'Grady summarizes work at the Ashlu Mine up to 1935 (MMAR 1935, Pages F1 to F6). This short article was for many years the best published reference available on the property. He describes a near surface stope from which a shipment was made in October 1934 of 5.9 tons assaying 3.40 oz/ton gold. Near the south margin of the mine workings, O'Grady reports 5.91 tons assaying 3.40 oz/ton Au were produced in August 1935 from the winze "F".

Regular reports, (MMAR 1937, 1938 and 1939) indicate that mining and milling proceeded on a small scale in the late thirties. Over 6,000 tons were mined in 1937 with an average grade of 0.37 oz/ton Au, 0.37 oz/ton Ag and 1.58% copper. The operation stopped for the winter months in 1937 due to transportation difficulties. About 27 men were employed; 15 men underground and 12 men on the surface and mill during 1938. W.V. Smitheringale was mine manager in 1939.

A number of assessment reports starting in the mid 1970's by W. Babkirk show that interest in the Ashlu Area revived with the general increase in gold prices. A short drill program in 1976 totaling 986' was logged by P. Sevensma. Developments in 1984 include construction of a 100 ton per day mill and a trackless decline into the old workings. This program was apparently halted due to a lack of ore.

The Mine and surrounding claims were optioned to Tenquille Resources and associated companies in 1988. Work was curtailed due to legal problems associated with the vendors.

There is a description of a gold-bearing quartz vein structure on a "Pykett Creek" in the 1935 MMAR which now is called Stuyvesant Creek north of the Ashlu Gold Mine. The creek central to the Josh, Danielle and Heather claims is named Pykett Creek on all modern maps. Old two-post claims have been held in this Pykett Creek area continuously for many years.

## GENERAL GEOLOGY

### A) Regional Geology

The regional geology of the Ashlu Creek area has been compiled by Roddick and Woodsworth (1979) as Open File 611, Figure 4. The area is completely within the Coast Plutonic Complex which is a belt of plutonic and metamorphic terrane, extending about 1800 km through British Columbia, southeast Alaska and Yukon Territory.

A narrow "roof pendant" septa occurs near the Josh claim and is composed of Gambier Group metasediments - volcanics of Lower Cretaceous age. Intrusive rocks are shown (Figure 3) as qd' - Leucocratic quartz diorite, minor granodiorite and tonalite.

### B) Local Geology and Prospecting

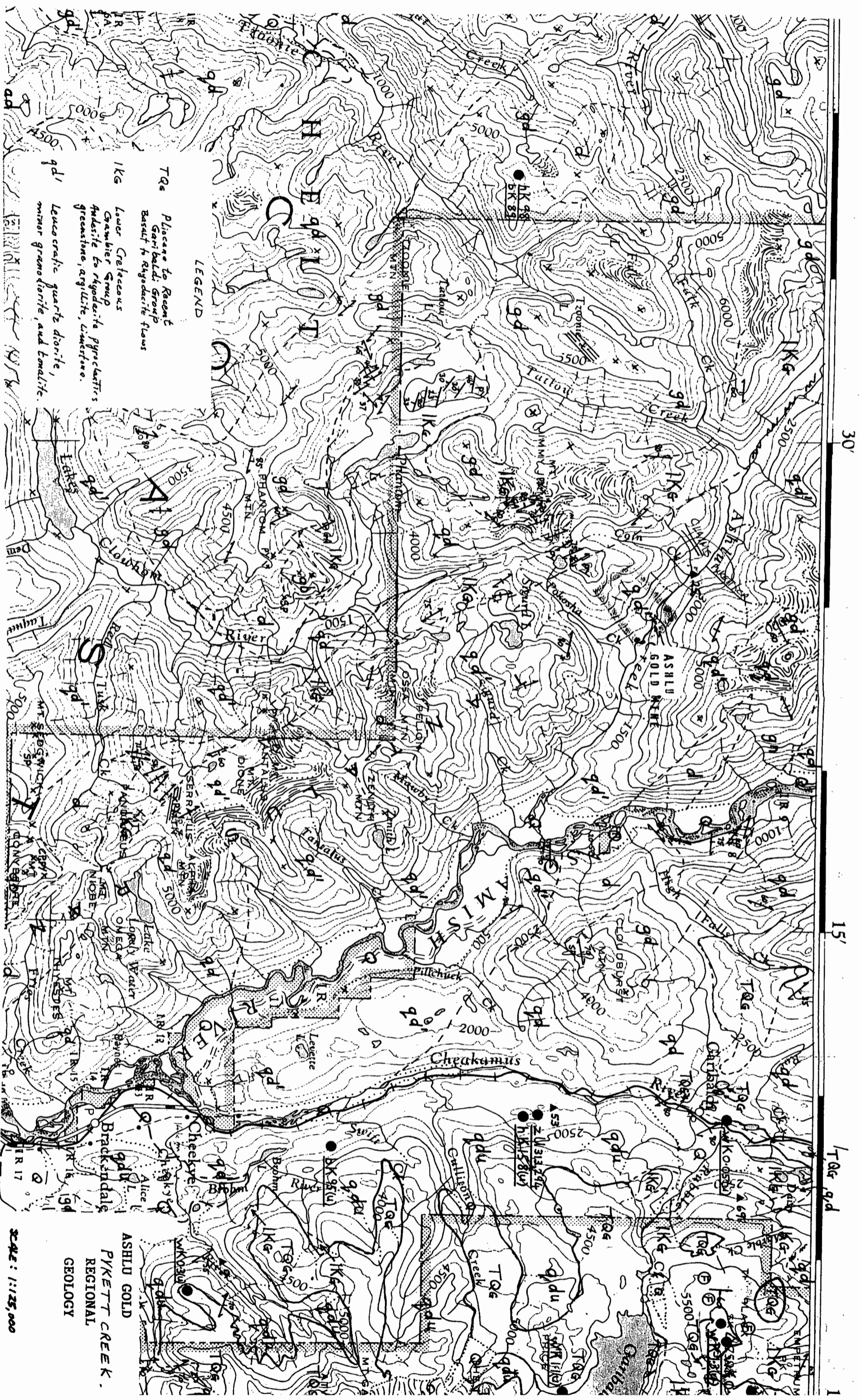
No previous detail geological maps except Mazacek (1988) were available during this study. One visit was made to the mine in November 1983 but no mapping or correlation was undertaken at that time. The following general observations are taken largely from O'Grady (1935), Shearer (1995) and from the current work. An important consideration in formulating a proposal for continued exploration is the proper understanding of the quartz veining system. O'Grady describes the dyke on Page F3 (1935):

The mineralized quartz deposits are intimately associated with a narrow zone of dark, basic, fine-grained highly altered rock traversing the granodiorite. Its relation to the lighter granite, which adjoins it on the hanging-wall side at points in the Golden Coin drift, is not known. Samples of this dark rock in or along which the deposits occur were found to show igneous characteristics in some specimens, the suite in general strongly suggesting contact phenomena whereby a hybrid such as is formed along a contact phase of granite rock has been produced. At one point on Pykett creek this rock resembles a dyke-structure, 6 to 8 feet wide, on the hanging-wall of the quartz-showing, granitic rock being exposed on the foot-wall. In the adit on the Golden Coin claim similar dark basic material forms the wall-rocks, but, as far as noted, lacks any definite structure, being distributed in irregular outline on one or both walls or as inclusions in the quartz, and generally blending with the surrounding granitic rocks without any definite lines of demarcation.

The quartz showings are often crushed and broken. They occur irregularly in bands, patches and stringers with inclusions and partings of wall rock. Figure 5 illustrates the location of O'Grady's observations.

Mineralized quartz has been found north of the Golden Coin portal starting about 250m along Ashlu Creek near the mouth of the modern day Stuyvesant Creek. Limited trenching and short underground workings were driven on these showings before 1930.

The petrographic study (Shearer, 1984) has indicated some new information concerning the nature of the dark "dyke-like" rock which is intimately associated with the quartz vein. It appears from thin section analysis that the "dyke" is actually phyllonite that developed from coarse grained granodiorite. Thus, movement along the shear-fault zone which produced the phyllonite border, also provided a channel way for the mineralizing solutions and subsequent overprinting of biotite and chlorite.



**LEGEND**

TQe Placene to Recent  
Gabbro; Group  
Basalt & Ryodacite flows

IKg Lower Cretaceous  
Gabbro Group  
Andesite to ryodacite pyroclastics  
greenstone, argillite, limestone.

qd' Leucocratic quartz diorite,  
minor granodiorite, and tonalite.

ASHLU GOLD  
PYKETT CREEK.  
REGIONAL  
GEOLOGY

SCALE: 1:125,000

FIGURE 4.

A well controlled geological map should be prepared to correlate surface exposures with underground workings. Mylonite may develop only at the intersection of major fault-pairs.

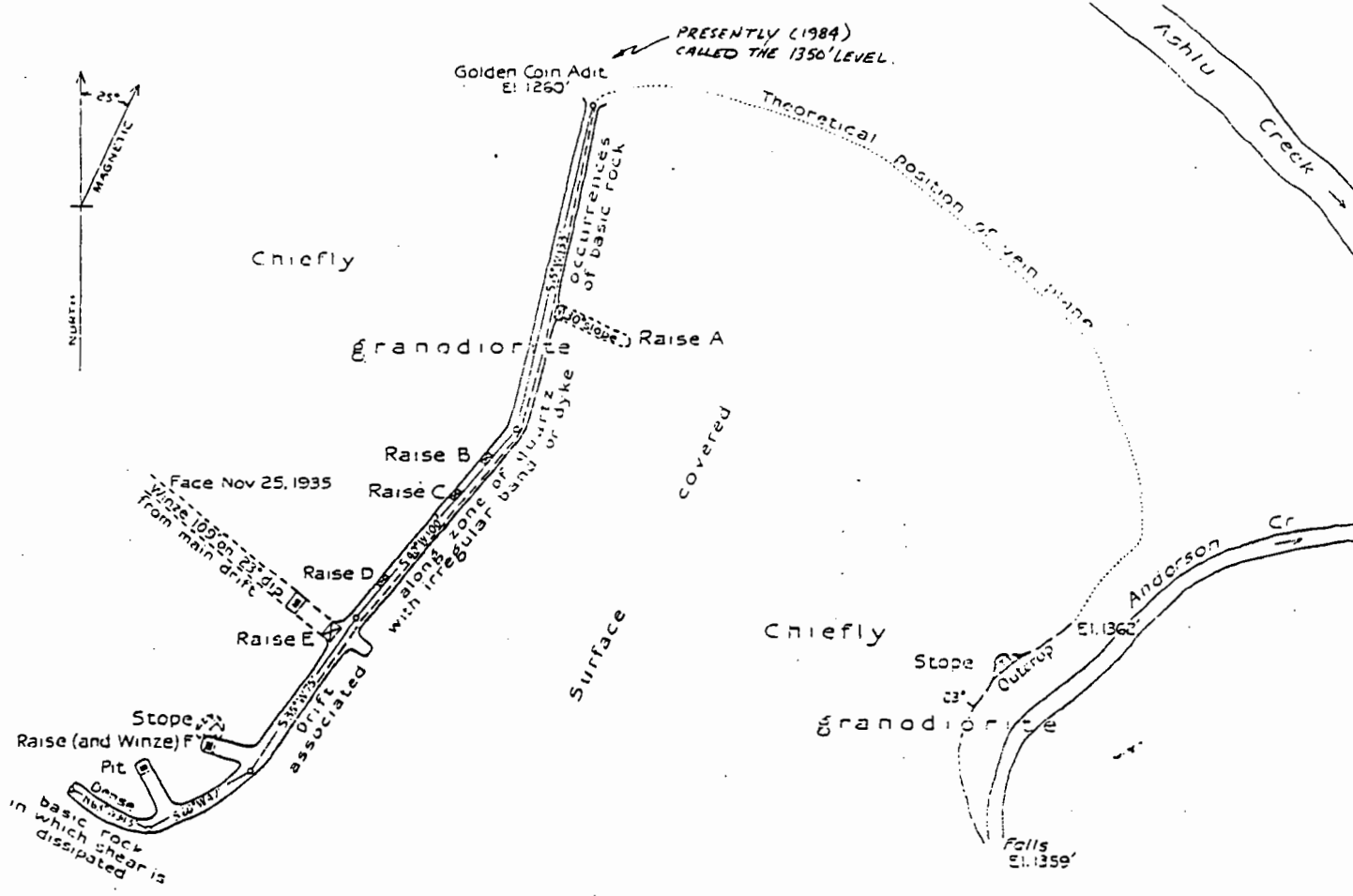
Granodiorite underlie most of the Pykett Creek Claims. Several narrow northwesterly trending belts of Gambier Group metavolcanics occur through the area. The Gambier Group rocks are mainly fine grained dark green altered andesite-basalt. Another mineralized quartz vein is the George vein, near Pokosha Creek. Mazacek (1988) describes the George vein as follows:

"It consists of a quartz vein, which is almost 10 meters wide (330°/60 S) and contains some spectacular aggregates of sulfide minerals. The quartz vein is situated at the contact of dacite and granodiorite. A 10 meter long old tunnel shows a good cross section of the George vein. In 1978, P. Sevensma, a geological consultant for Ashlu Mines took a "representative" 50 foot chip sample from the surface over the vein and dacite reported a value of 0.5 oz/ton Au. The showing was subsequently drilled by P. Sevensma in 1979 but the values were low."

Quartz float and veining in sub outcrop in the overburden covered area between the main showing area and northward to a 1 meter wide vein exposed in Ashlu Creek which assayed 0.121 oz/ton Au, suggests that the George vein could be part of a vein system extending for over one thousand meters.

Geological mapping and prospecting traverses on the Pykett Creek Claims are plotted on Figure 6 (in pocket).

The junction of Pykett Creek and the logging Mainline is marked by a large exposure of mafic-rich diorite which is cut and brecciated by light coloured felsic intrusive rocks. This outcrop contains abundant epidote alteration as irregular masses and narrow veinlets. The mafic-rich rocks have a crude layered appearance. Prospecting traverses, Figure 6, reveal that a considerable portion of the claims are covered in relatively thick overburden. White weathering boulders of highly lineated and rehealed sheared felsic gneiss are common. This altered rock was only mineralized with a trace of pyrite. Several specimens of sugary textured, fine grained intrusive were noted. Barren, white coarsely crystalline quartz float was found east of the mouth of Pykett Creek. However, no significant sulfide mineralization was observed in the present program.



LEGEND  
 in shear - - -

Scale 30 0 30 60 90 120 Feet

Sketch plan from Brunton survey  
 B.C. Department of Mines, 1935

Ashloo Gold Mining Syndicate. Sketch-plan of Golden Coin Workings.

### ASHLU GOLD MINE

#### FIGURE 5

SKETCH PLAN OF GOLDEN COIN ADIT 1935  
 BY O'GRADY, Department of Mines.

## PREVIOUS PETROLOGY and LITHOTHEQUE

The Ashlu Gold Mine has been studied in the past with special reference to several relatively rare telluride minerals (Trail, 1969 and Shearer, 1984). Tellurbismuth occurs associated with chalcopyrite, arsenopyrite, pyrrhotite, sphalerite, sylvanite, gold and galena in pyrite (Warren and Davies, 1940).

**Tellurbismuth** ( $\text{Bi}_2\text{Te}_3$ ) is a dark lead-grey mineral found as irregular plates or foliated masses with a general appearance similar to molybdenite. **Sylvanite** ( $\text{Ag Au Te}_2$ ), is a steel-grey to yellowish, silver-white mineral somewhat resembling the visual characteristics of pyrite. These two telluride minerals have the following properties:

	<b>Tellurbismuth</b>	<b>Sylvanite</b>
Cleavage:	(001) perfect	(010) perfect
Crystal form:	Hexagonal-R	monoclinic, prismatic - 2/m
Fracture:	somewhat sectile	Brittle, uneven Fracture
Hardness:	1½ - 2	1½ - 2
Luster:	metallic, soils paper	brilliant metallic
Specific gravity:	7.86	8.11
Microscopic:	white, weakly anisotropic	creamy white, strong pleochroic, strong anisotropic

Reference: Dana, Volume 1, 7th edition (1944), Page 160, 338.

In Shearer's study (1984), 2 specimens were prepared for reflected light examination: N30301 - quartz vein material from 1350 level and 998, an altered granodiorite from 1250 level.

Specimen N30301 is an example of mineralized quartz from the main part of the vein system. It contains mainly chalcopyrite and pyrite in roughly equal amounts with minor sphalerite.

Many individual grains of gold are present in sample N30301. Gold occurs in several distinct habits:

- (1) large "inclusions" in pyrite, up to grains 0.1 mm
- (2) very small blebs in chalcopyrite, less than 10 micron in size
- (3) free along fractures in quartz up to 40 microns long
- (4) along pyrite - quartz boundaries averaging 50 microns.

Good recovery of gold could be expected from (1) and (4) on gravity or standard flotation for pyrite. The gold occurring free in quartz would not be extracted unless grinding was fine enough for complete liberation. Gold associated with chalcopyrite would probably be recovered if a copper concentrate was produced. The overall percentage of gold associated with quartz as compared to gold enclosed in pyrite will dictate the economics of fine grinding versus additional gold recovery.

Several very tiny (less than 1 micron) grains of an unidentified mineral were noted as inclusions in sphalerite. These could possibly be tellurides, however no large unmistakable telluride minerals were noted in specimen N30301.

Sample 008 contained many small blebs of telluride (sylvanite and tellurbismuth) as rounded inclusions in euhedral pyrite. The pyrite has been introduced to the rock as indicated by the abundance of gangue throughout the sulfide crystals. Silica in the form of clear quartz accompanied the pyrite development.



Gold occurs in sample 008 as angular grains along cracks in the pyrite up to 35 microns in length. This mode of gold deposition should be readily amenable to extraction by cyanidation of the pyrite concentrate. It is unlikely that coarse grinding would be able to completely liberate gold of this type.

To properly define the average association of gold at the Ashlu Mine a larger number of samples would have to be cut and polished. Representative specimens could be collected during detail geological mapping of the underground workings.

The exact composition of the fine grained telluride minerals noted in specimen 008 could be identified by microprobe, a service offered by several commercial labs in Vancouver, if this information becomes important in the future.

Twelve samples were viewed under transmitted light. Their locations are mainly from the underground workings.

All thin section off-cuts (the slab which is a mirror image of the actual thin section) are mounted on 25 x 32 cm masonite boards and labeled. These boards should be inserted into a small cabinet for safe keeping. Typical cabinets have space for ten boards to slide in and out. Between 15 to 25 specimens are glued on each board, and are designed to be clean and portable enough to use with maps and other office materials. This organization of miniature rock specimens is called a **Lithotheque** as outlined by Laznicka (1974, 1975). **Lithotheque** plates should form an important part of any project's data base, in many respects similar to microfiche in a large conventional reference file.

An added benefit of having **Lithotheque** for the property is that rock names and diamond drill logs will be easily understood by individuals that are not directly involved with geological ideas or by those geologists/engineers that visit the mine infrequently.

Rock names at the Ashlu Mine have varied considerably over the years:

	1925 - diorite, intrusive dykes
	1930 - diabase, granite, granodiorite
O'Grady	1935 - granite, granodiorite, altered dark rock
Babkirk	1975 - quartz porphyry, mica granite, dark green volcanics
Sevensma	1977 - dark hornfels, mine dyke, quartz monzonite
Babkirk	1980 - quartz monzonite, diorite, granodiorite, quartz diorite with probable dyke rock
Shearer	1984 - granodiorite
Mazacek	1988 - granodiorite

The fresh unaltered host rocks, specimens, N29301 (004), 005, 001, clearly lie within the **granodiorite** composition. They are intermediate between granite/syenite on the felsic side and gabbro/diorite on the mafic rich endmembers. Granodiorite is also midway between quartz monzonite and quartz diorite. Host rocks at the Ashlu Mine contain abundant quartz with potassium feldspars slightly subordinate to plagioclase. One half of the section off-cut was stained for potassium feldspar (refer to Lithotheque board Number 1) which gives a bright yellow colouration on contained k-spar. I would recommend having the necessary chemicals on hand during future diamond drill programs to perform this simple test for potassium feldspars.

An important aspect of the present petrographic study was to shed some light on the origin of the dark, fine grained, mafic rich rocks associated with the quartz vein which in the past has been called a dyke. Examination of specimens 007, N30302a, 010 and 80-6 indicate that these rocks resemble extremely altered granodiorite and can, perhaps, better be termed **phylonites**. **Phylonites** are intensely deformed rocks.

The fine grained structure of a **phyllonite** is a result of reduction of grain size during deformation of originally coarser rocks. In the case of the Ashlu Mine area the **phyllonites** developed due to cataclastic stress caused by movement along a major fault. Another term often used in the Coast Plutonic Complex for such rocks, although with less accuracy, is **Mylonite**.

**Mylonite:** a fine grained, laminated rock formed by extreme microbecciation and milling of rocks during movement on fault surfaces. Metamorphism is dominated cataclastic with little or no growth of new crystals.

**Phyllonite:** fine grained rocks formed by extreme deformation of originally coarse-grained rocks. Reduction in grain size has been followed or accompanied by recrystallization of some minerals. (resembles a phyllite superficially).

Thin section observations illustrates that the granulation in specimen 30302A of larger quartz grains along slip planes now filled with fibrous chlorite. The more altered varieties, such as 007, 13303 and N303028, exhibit ghosts of relict larger crystals. During repeated movements of the major fault structure an overprinting of biotite occurred, associated with chlorite.

The irregular nature of the "dyke" described by O'Grady can now be seen to be a product of the fault movement rather than a complex intrusion. Movement along the quartz vein system also occurred after the formation of the phyllonite unit as indicated by inclusions of the phyllonite with the quartz vein.

It is possible that the presence of the phyllonite, aside form showing intense cataclastic deformation, has little genetic relationship to the gold contained in the quartz vein-sulfide shoots.

There are a number of questions that can only be answered with a combination of petrographic, detail geological mapping and drill hole correlation:

- (1) is the pinching and swelling of the quartz vein on any definable pattern?
- (2) are the sulfide concentrations within the quartz vein also on a definable pattern?
- (3) are the crushed and broken quartz vein sections restricted to local structures, or was major movement widespread after vein formation?
- (4) are phyllonite and less altered host rock inclusion within quartz distributed throughout the vein system?
- (5) are the footwall stringers more common in particular areas?
- (6) The bounding faults as presently defined appear to be based on a dyke interpretation of the phyllonite unit. Does the major fault on which most movement took place continue past where the phyllonite was developed? Such a fault would be expected to be very extensive both in horizontal and vertical dimension.
- (7) can discrete episodes of movement be differentiated? (a) Phyllonite development (b) vein formation (c) late stage brecciation.
- (8) are some of the major faults "synplutonic", that is faults formed while the granitic rock was still capable of recrystallization? Such faults are commonly healed by recrystallization.
- (9) are intrusive breccia zones or agmatite related to subsequent fault location?

Synthesis of all known data will also follow priorities to be assigned to exploration targets.

## CONCLUSIONS and RECOMMENDATIONS

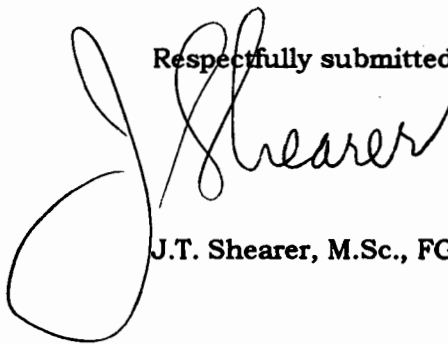
The Pykett Creek Property is mainly underlain by Coast Plutonic Complex granodiorite and are located 2.5 km west of the old Ashlu Gold Mine which sustained a small production of gold in the 1920's and 1930's. Stopping has occurred mainly in near surface underground workings from a narrow, irregular quartz vein system. A larger vein, referred to as the George vein, near Pokosha Creek, was examined in the 1995 work. Mineralized outcrops suggest that the George vein may be larger than the vein system in the old Ashlu Gold Mine. No mineralized quartz showings were found in the present program on the Pykett Creek Claims. A sample previously collected assayed 0.8 oz/ton but unfortunately the location of this sample is not presently known.

Intrusive rock, correctly defined as **biotite granodiorite** host the quartz vein at the Ashlu Gold Mine. No uniformity in rock nomenclature has existed in the past. A complex fine-grained, dark mafic-rich rock which is intimately associated with the quartz vein system is indicated by the previous study to be **phylonite** rather than an "dyke". This **phylonite** is a product of the cataclastic deformation along a fault. The dark colour is a result of secondary biotite and hornblende. Mineralizing solutions carrying gold may be contemporaneous with introduction of mafic minerals.

At the Ashlu Gold Mine, gold was noted most often as large grains (0.1 mm) completely enclosed by late stage pyrite. Several other gold associations occur including free along fractures in quartz.

Specific recommendations are (1) Use and add to the **Lithothèque** library for uniformity of rock names and for continuity between workers: (2) Give special attention during surface mapping around the property to distribution of phylonite units and, if possible, trace the faults responsible for cataclastic deformation beyond the extent of phylonite development. Postulated faults based on assumed off-sets on "dyke" (phylonite) should be discarded. (3) Concentrate prospecting along the Ashlu Creek where Minfile plots a Gold showing.

Respectfully submitted,



J.T. Shearer, M.Sc., FGAC, P.Geo.

## ESTIMATED COST of FUTURE WORK

Detailed prospecting, soil sampling and trenching along the Ashlu Creek near the junction with Coin Creek.

### Phase I - Detailed Prospecting, Geochemistry

Prospecting and Geological mapping	9,000.00
Transportation	600.00
Accommodation and Meals	1,500.00
Analytical 200 soils X \$24.50	4,900.00
Report preparation, Word Processing, Reproduction	2,000.00
10% Contingency	<u>2,000.00</u>
Phase I Total	\$20,000.00

### Phase II - Trenching on the newly discovered veins

& Diamond Drilling if the results from Phase I warrant follow-up.

Geological Control	10,000.00
Backhoe Trenching	14,000.00
Diamond Drilling 2,000 ft @ \$30.00 all in cost	30,000.00
Accommodation and Meals	5,000.00
Transportation	
3,000.00	
Analytical	6,000.00
Report preparation, Word Processing, Reproduction	2,500.00
10% Contingency	<u>10,000.00</u>
Phase II Total	\$110,000.00

**GRAND TOTAL Phase I & II                      \$130,000.00**

## REFERENCES

- Babkirk, W. 1975 Assessment Report 5592  
DDH#2, 60 feet  
1976 Assessment Report 6043 Diamond Drilling  
1978 Assessment Report 7403 Diamond Drilling  
1980 Assessment Report 8084 Diamond Drilling  
OS-1 + OS-2  
1982 Assessment Report 10633
- British Columbia Department of Mines, Minister of Mines, Annual Report  
1924, p.242; 1925, p. 299; 1930, p. 310; 1935, PF1 to F6; 1937, PF34;  
1938, PF68; 1939 p.86.
- Cooper, M.W., 1976. Ashlu Gold - Tungsten Property. B.C. Assessment Report 6155, Drill logs of 4 holes, 986' drilled in October 1976.
- Fisher, J.W., 1983. Engineering Report for Osprey Mining & Exploration Ltd.
- Johnson, A.E., 1972. Mineralogical Investigation of a gold-silver ore from Kleanza Mountain, Terrace Area, B.C., 6 pp, Mines Branch Investigation Report IR 72-20. Dept. Energy, Mines and Resources, Ottawa.
- Kennedy, E.G., 1986. Economic Evaluation of the Ashlu Creek Gold-Tungsten Property, Hawk 1 & 2 Claims, Geological Report for Tenquille Resources Ltd.
- Laznicka, P., 1974. Lithotheque, A System of Rock and Mineral Specimens Arrangement. Publication No. 5, Dept. of Earth Sci., University of Manitoba, 31 pages.  
1975, Exploring with Lithotheque, Western Miner, February 1975, P. 32-39.
- Lenher, V. 1909. Some Observations on the Tellurides. Econ. Geol., Vol. 4, Page 544-564.
- Mazacek P., 1988. Assessment Report for Hawk Claim Group, Vancouver Mining District Report for Valentine Gold Corporation, B.C. DM Assess Rpt 17889 Oct. 10, 1988.
- McIntyre Associates, 1983. Underground Plan, Ashlu Gold Mine, 1 inch = 40 feet., one sheet.
- Roddick, J.A. and Woodsworth, G.J., 1979. Geology of Vancouver West Half and mainland part of Alberni Geological Survey of Canada, Open File 611 one sheet 1:125,000.
- Sevensma, P.H., 1978. Ash Claims, Ashlu Creek Area, Report on 1977 Drilling Program, Private Report for Ashlu Gold Mines.
- Shearer, J.T., 1984. Petrology and Lithotheque of the Ashlu Gold Mine, Private Report for Osprey Mining, 19 pp.
- Shearer, J.T., 1995. Geology and Prospecting Report on the Ashlu 1-5 Mineral Claims, Private Report for Van City Marble Ltd. 25 pp.
- Stemerowicz, A. and Bruce, R.W., 1974. Concentration and Recovery of Gold and Silver from a telluride ore submitted by Keanza Mines Ltd., Terrace Area, B.C., 15 pp. Mines Branch Investigation Report IR-74-4. Dept. of Energy, Mines and Resources, Ottawa.
- Trail, R.J., 1969. A Catalogue of Canadian Minerals. Geological Survey of Canada, Paper 69-45, p. 547. Tellurbismuth.

# **APPENDIX I**

## **STATEMENT OF QUALIFICATIONS**

**J.T. SHEARER, M.Sc., P.Geo.**

**June 30, 1996**

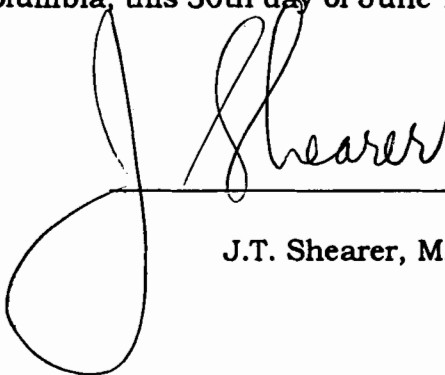
## Appendix I

### STATEMENT OF QUALIFICATIONS

I, JOHAN T. SHEARER, of 1817 Greenmount Avenue, in the City of Port Coquitlam, in the Province of British Columbia, do hereby certify:

1. I am a graduate of the University of British Columbia (B.Sc., 1973) in Honours Geology, and the University of London, Imperial College (M.Sc., 1977).
2. I have over 20 years experience in exploration for base and precious metals and industrial mineral commodities in the Cordillera of Western North America with such companies as McIntyre Mines Ltd., J.C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd.
3. I am a fellow in good standing of the Geological Association of Canada (Fellow No. F439) and I am a member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (Member No. 19,279).
4. I am an independent consulting geologist employed since December 1986 by Homegold Resources Ltd. at #5-2330 Tyner St., Port Coquitlam, B.C.
5. I am the author of a report entitled "Geological and Prospecting Report on the Pykett Creek Property, Ashlu Creek Area, Squamish-Whistler, British Columbia" dated June 30, 1996.
6. I have visited the property on June 17 & 18, and June 24 & 25, 1996 and numerous times in previous years. I have carried out mapping and sample collection and am familiar with the regional geology and geology of nearby properties. I have become familiar with the previous work conducted on the Pykett Creek claims by examining in detail the available reports and maps and have discussed previous work with persons knowledgeable of the area.

Dated at Vancouver, British Columbia, this 30th day of June 1996.

A handwritten signature in black ink, appearing to read 'J. Shearer', is written over a horizontal line. The signature is stylized with a large loop at the end.

J.T. Shearer, M.Sc., F.G.A.C., P.Geo.

**APPENDIX II**

**STATEMENT OF COSTS  
1995 - 1996**

**June 30, 1996**





# **APPENDIX III**

**Claim Records of Josh, Danielle & Heather**

**June 30, 1996**



RECORD OF 2 POST CLAIM — MINERAL TENURE ACT

(Section 23)

Vancouver

Tenure No. 337360

Mining Division

Date of Record July 07, 19 95

DO NOT WRITE IN THIS SHADED AREA

Blalati  
at Deputy Gold Commissioner

PLEASE PRINT CLEARLY

1. Doug Morneau  
Name of Locator  
1357 Arde Avenue  
Address  
Port Coquitlam B.C.  
V3B 1S46 878 0811  
Postal Code Telephone

AGENT FOR Self  
Name  
Address  
Postal Code Telephone

Client No. 118902

Client No.

hereby apply for a record of a 2 post claim claim for the location as outlined on the attached copy of mineral titles reference map No. 92G 14 W in the Vancouver Mining Division.

Describe how you gained access to the location; include references to roads, trails, topographic features, permanent landmarks and a description of the legal post location.

Via Hwy 99 x Cheakamus I.R. 11 to Ashla Cr. Road - mile 29  
(see Map 92G.14)

The legal post is located 212° to Δ Mount Jimmy Jimmy and 130° to Δ Cloud Burst Mtn. (200 m @ 194° from Ashla Road / Pyke + Creek bridge)

I have securely affixed the portion of the metal identification tag embossed "INITIAL POST (No. 1)" to the initial post and impressed this information on the tag:

TAG NUMBER 663121 M  
INITIAL POST (No. 1)  
CLAIM NAME JOSH  
LOCATOR DOUG MORNEAU  
AGENT FOR SELF  
DATE COMMENCED JULY 05/95  
TIME COMMENCED 7:00 AM  
DIR. TO F.P. 132°  
METRES TO RIGHT 500  
METRES TO LEFT 0

I have securely affixed the portion of the metal identification tag embossed "FINAL POST (No. 2)" to the final post (or the witness post\*) and impressed this information on the tag:

TAG NUMBER 663121 M  
FINAL POST (No. 2)  
CLAIM NAME JOSH  
LOCATOR DOUG MORNEAU  
AGENT FOR SELF  
DIST. FROM I.P. 500 m  
DATE COMPLETED JULY 05/95  
TIME COMPLETED 9:10 AM  
\*If witness post placed for final post:  
Bearing to true position of final post  
distance metres.

I have complied with all the terms and conditions of the Mineral Tenure Act and Regulation pertaining to the location of 2 post claims and have attached a plan of the location on which the positions of the initial and final posts (and witness post if applicable) are indicated.

Do you intend to extract Industrial Minerals from this tenure? Yes  No

Signature of Locator

# 6 JUL - 7 1995 \$20.  
Gold Commissioner's Office  
VANCOUVER, B.C.  
RECORDING STAMP

APPLICATION TO RECORD A 2 POST CLAIM

ACCESS

201

MINING

WORK



RECORD OF 2 POST CLAIM — MINERAL TENURE ACT

(Section 23)

Vancouver

Mining Division

Tenure No. 337361

DO NOT WRITE IN THIS SHADED AREA

*R. Malati*  
attn: *attn: Deputy*  
Gold Commissioner

Date of Record July 07, 1995

PLEASE PRINT CLEARLY

APPLICATION TO RECORD A 2 POST CLAIM

1. *Doug Mornrean* AGENT FOR *SELF*  
Name of Locator  
*1352 Orville Avenue* Address  
*Port Louisa B.C.* Address  
*V3B 5H6 878 0811* Postal Code Telephone  
Postal Code Telephone  
Client No. *118902* Client No.

hereby apply for a record of a 2 post claim claim for the location as outlined on the attached copy of mineral titles reference map No. *926 14VV* in the *Vancouver* Mining Division.

ACCESS

Describe how you gained access to the location; include references to roads, trails, topographic features, permanent landmarks and a description of the legal post location.

*Via Hwy 99 x Cheakamus I.R. " to Ashka Creek Road - mile 29*  
*(See map 926.14)*

*The legal post is located 210° to Δ Mount Jerningham and*  
*180° to Δ Cloud Burst Mtn. (200m @ 194° from Ashka Road / Pykett Ck Bridge)*

I have securely affixed the portion of the metal identification tag embossed "INITIAL POST (No. 1)" to the initial post and impressed this information on the tag:

TAG NUMBER *663122* M  
INITIAL POST (No. 1)

CLAIM NAME *DANIELLE*  
LOCATOR *DOUG MORNEAN*  
AGENT FOR *SELF*  
DATE COMMENCED *JULY 05/95*  
TIME COMMENCED *7:0 AM*  
DIR. TO F.P. *132°*  
METRES TO RIGHT *0*  
METRES TO LEFT *500*

I have securely affixed the portion of the metal identification tag embossed "FINAL POST (No. 2)" to the final post (or the witness post) and impressed this information on the tag:

TAG NUMBER *663122* M  
FINAL POST (No. 2)

CLAIM NAME *DANIELLE*  
LOCATOR *DOUG MORNEAN*  
AGENT FOR *SELF*  
DIST. FROM I.P. *500m*  
DATE COMPLETED *JULY 05/95*  
TIME COMPLETED *9:0 AM*

\*If witness post placed for final post:  
Bearing to true position of final post \_\_\_\_\_  
distance \_\_\_\_\_ metres.

I have complied with all the terms and conditions of the Mineral Tenure Act and Regulation pertaining to the location of 2 post claims and have attached a plan of the location on which the positions of the initial and final posts (and witness post if applicable) are indicated.

Do you intend to extract Industrial Minerals from this tenure? Yes  No

Signature of Locator *[Signature]*

#6 JUL - 7 1995 \$20.  
Gold Commissioner's Office  
VANCOUVER, B.C.  
RECORDING STAMP *[Signature]*



RECORD OF 2 POST CLAIM — MINERAL TENURE ACT

(Section 23)

Mining Division

Tenure No.

DO NOT WRITE IN THIS SHADED AREA

Gold Commissioner

Date of Record

19

PLEASE PRINT CLEARLY

I, DOUG E. MORNEAU

AGENT FOR

Name of Locator

Name

1352 ORIOLE AVE.,

Address

Address

PORT COQUITLAM, B.C.

V3B5H6

944-1917

Postal Code

Telephone

Postal Code

Telephone

Client No. 118902

Client No.

hereby apply for a record of a 2 post claim claim for the location as outlined on the attached copy of mineral titles reference

map No. 92 G / 14 W

in the VANCOUVER

Mining Division.

ACCESS

Describe how you gained access to the location; include references to roads, trails, topographic features, permanent landmarks and a description of the legal post location.

North of Squamish, 32 km on the Squamish River Road to the Ashlu Road turn-off, west along the Ashlu Forestry Road to 29.5 mile sign, I.P. is 100m east of the junction of Pykett Creek and the mainline, I.P. 25m west of mainline

I have securely affixed the portion of the metal identification tag embossed "INITIAL POST (No. 1)" to the initial post and impressed this information on the tag:

TAG NUMBER 668360 M INITIAL POST (No. 1)

CLAIM NAME HEATHER

LOCATOR D. MORNEAU

AGENT FOR

DATE COMMENCED JUNE 12 1996

TIME COMMENCED 11:00 AM

DIR. TO F.P. 312° Az.

METRES TO RIGHT 150m

METRES TO LEFT 350m

I have securely affixed the portion of the metal identification tag embossed "FINAL POST (No. 2)" to the final post (or the witness post\*) and impressed this information on the tag:

TAG NUMBER 668360 M FINAL POST (No. 2)

CLAIM NAME HEATHER

LOCATOR D. MORNEAU

AGENT FOR

DIST. FROM I.P. 500m

DATE COMPLETED JUNE 12 1996

TIME COMPLETED 1:00 PM

\*If witness post placed for final post:

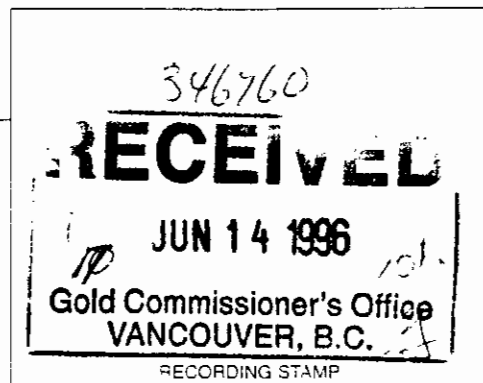
Bearing to true position of final post

distance metres.

I have complied with all the terms and conditions of the Mineral Tenure Act and Regulation pertaining to the location of 2 post claims and have attached a plan of the location on which the positions of the initial and final posts (and witness post if applicable) are indicated.

Do you intend to extract Industrial Minerals from this tenure? Yes No

Signature of Locator



MTL 135 REV 94-05

MTL 135 REV 94-05

MTL 135 REV 94-05

MTL 135 REV 94-05

24,563

LEGEND

- bgd BIOTITE GRANODIORITE
- gabbro-diorite
- CP CHLORITIC PHYLLONITE
- kg CAMBIER GROUP, Altered Volcanics

- PROSPECTING TRAVERSE
- OUTCROP
- ROAD
- QUARTZ VEIN

N.T.S. 926/19W SCALE: 1:5,000  
WORK BY: JTS & DM FIGURE 6

