

SUMMARY REPORT  
DIAMOND DRILLING AND GEOPHYSICAL WORK  
ARENT 1, ARENT 2, BEAMA  
AND  
ADJACENT CLAIMS  
NORTH AND SOUTH CLAIM GROUPS  
YELLOWJACKET PROPERTY  
ATLIN MINING DIVISION

VOLUME I OF II



NTS: 104N.12  
LATITUDE: 59 deg. 36 min. north  
LONGITUDE: 133 deg. 33 min. west

FILMED

OWNER: HOMESTAKE MINERAL DEVELOPMENT COMPANY

OPERATOR: HOMESTAKE MINERAL DEVELOPMENT COMPANY

BY: PETER A. RONNING

DATE: DECEMBER 1986

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,740**  
**PART 1 OF 2**

SMITHERS

FAME REPORT (E86)

15740



Province of  
British Columbia

Ministry of  
Energy, Mines and  
Petroleum Resources

REPORT NUMBER  
TITLE PAGE

TYPE OF REPORT/SURVEY(S) <b>DRILLING; GEOPHYSICAL</b>	TOTAL COST <b>426,857.02</b>
--	---------------------------------

AUTHOR(S) **P.A. Ronning** SIGNATURE(S)

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED **Jan. 20/87** YEAR OF WORK **1986**

PROPERTY NAME(S)  
**YELLOWJACKET**

COMMODITIES PRESENT **Au, Mt**

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN **104N-43**

MINING DIVISION **Atlin** NTS **104N/12E**

LATITUDE **59° 35' 44"** LONGITUDE **133° 32' 31"**

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that cover the property. (Example: The 100' x 100' units) PHOENIX (Lot 1306) Mineral Lease M 100 Mineral Claim Certificate Mining Lease ML 12 (claims overlaid)

*see back*

OWNER(S)  
**Homestake Mineral Development  
Company**

MAILING ADDRESS

OPERATOR(S) (that is, Company paying for the work)  
**as above**

MAILING ADDRESS

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size and attitude)  
*Upper Paleozoic and Lower Triassic oceanic crust forms the upper plate of an easterly dipping thrust fault. The Yellowjacket property is underlain by basalt and serpentized ultramafic rocks. Extensive zones of carbonatization is associated with zones of shearing.*

REFERENCES TO PREVIOUS WORK

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
<b>GEOLOGICAL (scale, area)</b>			
Ground			
Photo			
<b>GEOPHYSICAL (line kilometres)</b>			
Ground			
Magnetic	<u>MAGA</u> 256.0 km		
Electromagnetic	<u>EMAB</u> 256.0 km VLF		
Induced Polarization	<u>MAGG</u> 88.2 km		
Radiometric	<u>EMGR</u> 88.2 km		
Seismic			
Other	<u>IPOI</u> 6.6 km		
Airborne			
<b>GEOCHEMICAL (number of samples analysed for ...)</b>			
Soil			
Silt			
Rock			
Other			
<b>DRILLING (total metres, number of holes, size)</b>			
Core	<u>DIAD</u> 2250.0m; 14 holes; HQ		
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying	<u>SAMP</u> 904; Au		
Petrographic			
Mineralogic			
Metallurgic	<u>META</u> 1		
<b>PROSPECTING (scale, area)</b>			
<b>PREPARATORY/PHYSICAL</b>			
Legal surveys (scale, area)			
Topographic (scale, area)			
Photogrammetric (scale, area)			
Line/grid (kilometres)	<u>LINE</u> 88.2 km		
Road, local access (kilometres)			
Trench (metres)			
Underground (metres)			
			TOTAL COST 426,857.82

GIN, BEAMA, TIP, TOPI, ARENT 1, 2,  
 CAL II, TEDI, WIND II, RIP,  
 ZIP, JACK 7, YJ 7, TOPI II,

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS
Value work done (from report) 426,857.82				
Value of work approved				
Value claimed (from statement)				
Value credited to PAC account				
Value debited to PAC account				
Accepted Date Feb. 26/88	15740			(1)





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in pocket

## 5. SUMMARY AND RECOMMENDATIONS

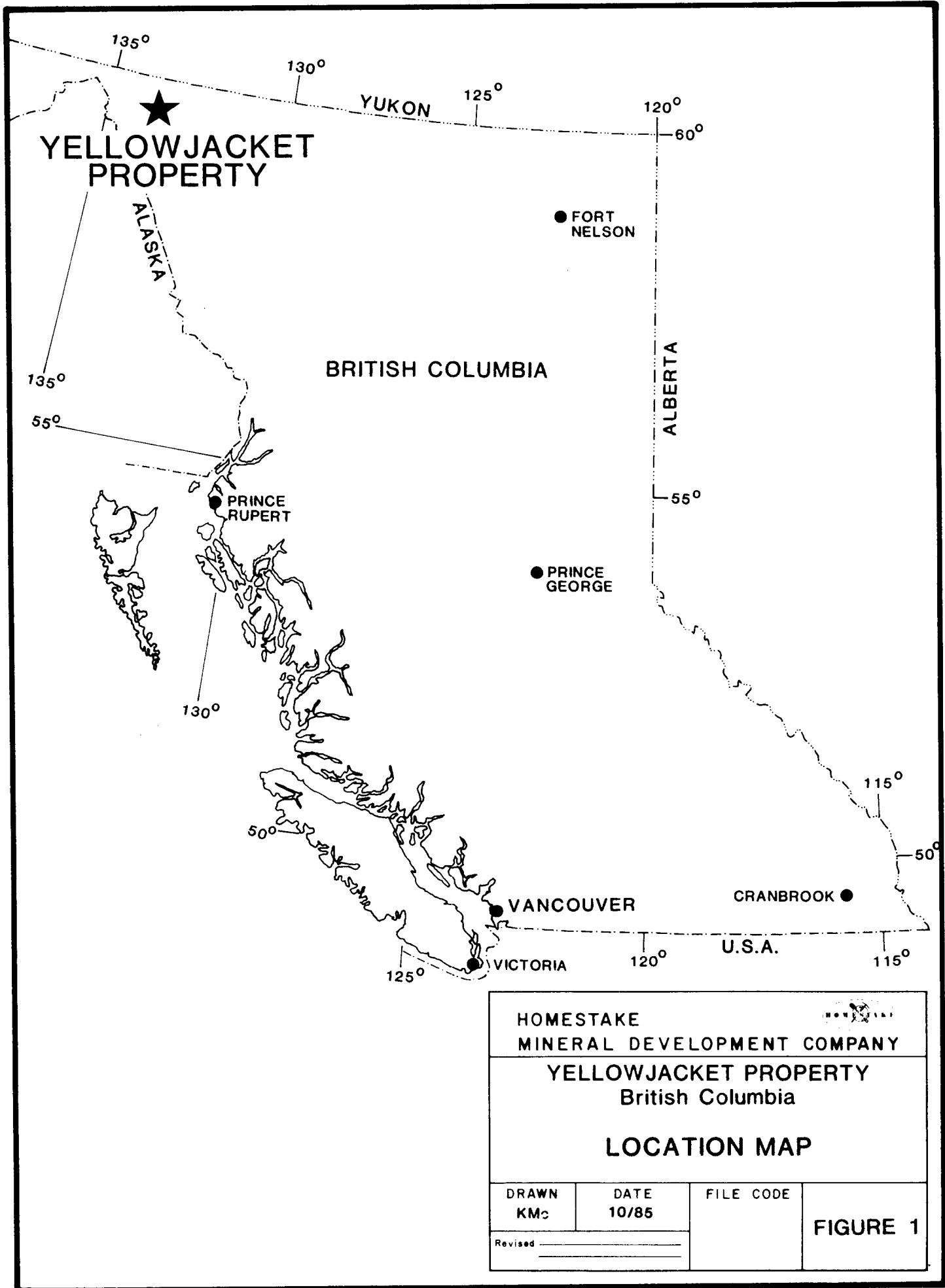
The Yellowjacket Property and vicinity, on Pine Creek, are underlain by Permian and Pennsylvanian greenstones and related sediments, intruded by serpentinized ultramafic rocks. Information from both diamond drilling and geophysical surveys indicates that Pine Creek follows a major fault zone which trends about 250 degrees. This fault zone, and its associated cross-faults, have been activated and re-activated several times. Fracture permeability resulting from the faulting has formed a plumbing system for hydrothermal fluids which have produced quartz-carbonate alteration of varying intensity.

Free gold is carried by some quartz veins. In the Yellowjacket Zone, diamond drilling encountered significant gold mineralization with grades of up to 17.9 g Au/tonne over 3 meters. The gold is coarse, and difficult to assay due to a nugget effect.

Results of the drilling within the Yellowjacket Zone have been encouraging, but drilling has not yet been sufficient to determine the dimensions of the mineralized zone or estimate its tonnage. Further diamond drilling is required to delineate it.

Drilling outside of the Yellowjacket Zone has not encountered significant mineralization.

Geophysical surveys have suggested that the Yellowjacket Zone may be localized near the intersection of two lineaments, presumed to be fault zones. Similarly favourable structural zones elsewhere on the property may be good exploration targets. Due to limited outcrop these cannot be tested by surface prospecting. A program of exploration drilling using a reverse circulation rig is suggested for testing such targets.



★  
**YELLOWJACKET  
 PROPERTY**

ALASKA

BRITISH COLUMBIA

ALBERTA

● FORT NELSON

● PRINCE RUPERT

● PRINCE GEORGE

● VANCOUVER

● CRANBROOK

● VICTORIA

U.S.A.

HOMESTAKE  
 MINERAL DEVELOPMENT COMPANY

**YELLOWJACKET PROPERTY**  
 British Columbia

**LOCATION MAP**

DRAWN KMc	DATE 10/85	FILE CODE	<b>FIGURE 1</b>
Revised _____			

# 1. INTRODUCTION

## 1.1 Location and Access

The Yellowjacket property is located in the valley of Pine Creek, about 9 km. east-northeast of the village of Atlin in northern British Columbia. It is on NTS map sheet 104N.12, in the Atlin Mining Division.

Pine Creek is an historic and continuing placer gold producer served by a well-maintained gravel road. The center of activity on the Yellowjacket property is about 12 km. by road from Atlin.

## 1.2 Property Definition

### 1.2.1. History of the Property

The following history is taken from Watkins & Atkinson, 1985:

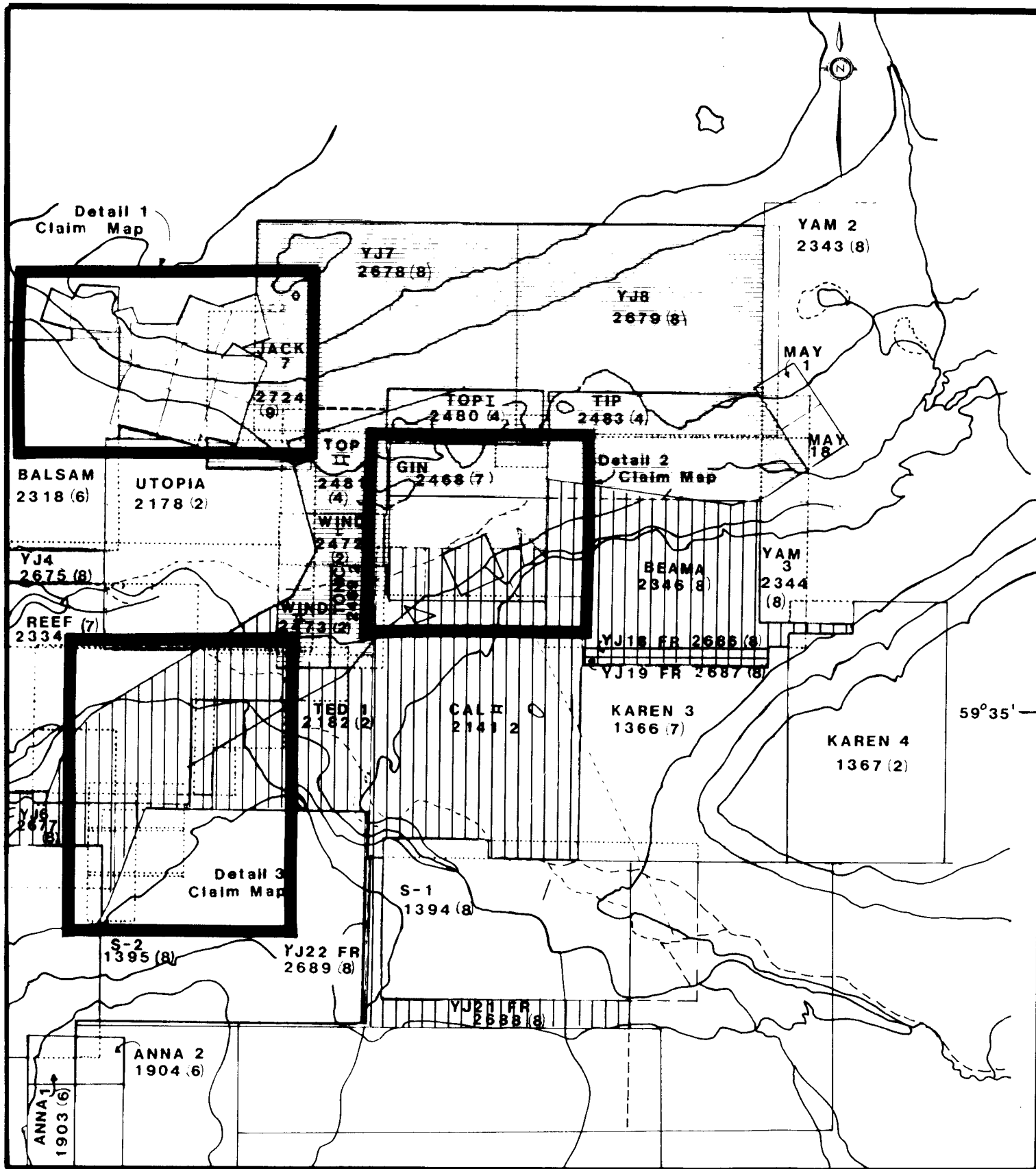
Several quartz veins carrying free gold were located along the course of Pine Creek in 1899 by placer miners. The Nimrod Syndicate tied up the discoveries and shallow shafts were sunk on the Yellowjacket showing (B.C. Dept. Mines Annual Reports; 1902, p. 984; 1903, p. H38; 1904 p. H44; and 1933, p. A78-A79), the Rock of Ages showing (B.C. Dept. Mines Annual Reports; 1903, p. H38 and 195, p. G78) and the Red Jacket showing (B.C. Department of Mines Annual Reports; 1901, p. 759 and 1905 p. G77-G78). Development work was discontinued in 1903 or 1904.

In the years that followed, all surface features related to the early development of these showings were destroyed by placer mining. The exact locations of the original discoveries are not known.

In 1983, local prospectors staked the area of the old discoveries. The claims were optioned to Canova Resources and Tri-Pacific Resources of Vancouver. These companies carried out programs of ground geophysics, diamond drilling and rotary drilling in 1984 and 1985.

### 1.2.2. Owner and Operator

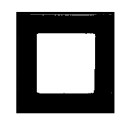
The exploration described in this report was carried out during 1986 by Homestake Mineral Development Company under the terms of an option agreement with Canova Resources Ltd. and Tri-Pacific Resources Ltd. Homestake is the operator and the owner of record.



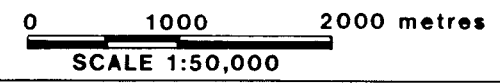
GROUP 1



GROUP 2



See following detailed sketches



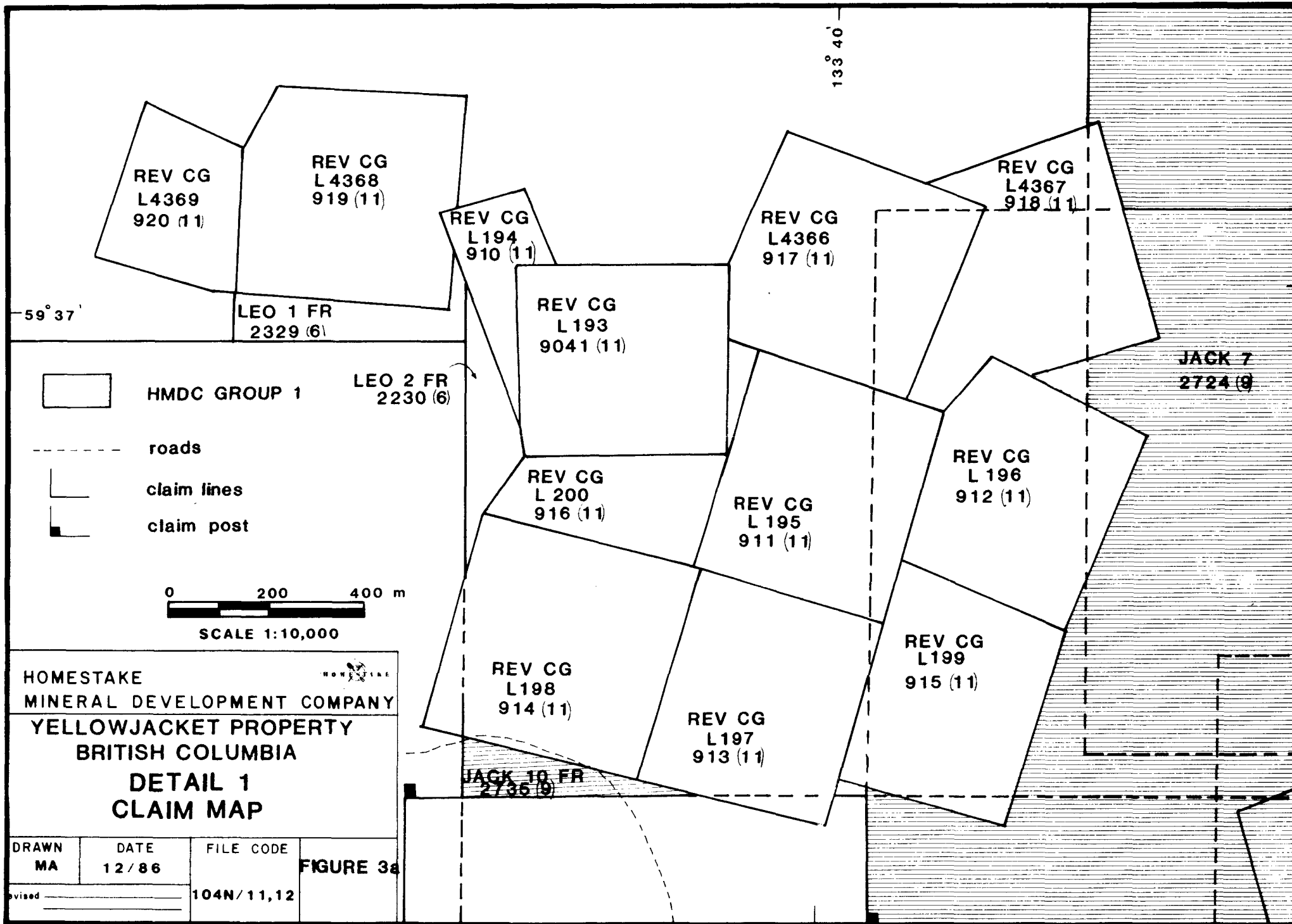
HOMESTAKE  
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY  
BRITISH COLUMBIA

**CLAIM MAP**

DRAWN	DATE	FILE CODE	FIGURE 2
	11/86	104N/11,12	
Revised			





REV CG  
L4369  
920 (11)

REV CG  
L4368  
919 (11)

REV CG  
L194  
910 (11)

REV CG  
L4366  
917 (11)

REV CG  
L4367  
918 (11)

59° 37'

LEO 1 FR  
2329 (6)

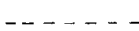
REV CG  
L193  
9041 (11)

JACK 7  
2724 (9)



HMDC GROUP 1

LEO 2 FR  
2230 (6)



roads



claim lines



claim post

0 200 400 m

SCALE 1:10,000

HOMESTAKE  
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY  
BRITISH COLUMBIA

DETAIL 1  
CLAIM MAP

REV CG  
L198  
914 (11)

REV CG  
L195  
911 (11)

REV CG  
L196  
912 (11)

REV CG  
L199  
915 (11)

REV CG  
L197  
913 (11)

JACK 10 FR  
2736 (9)

DRAWN  
MA

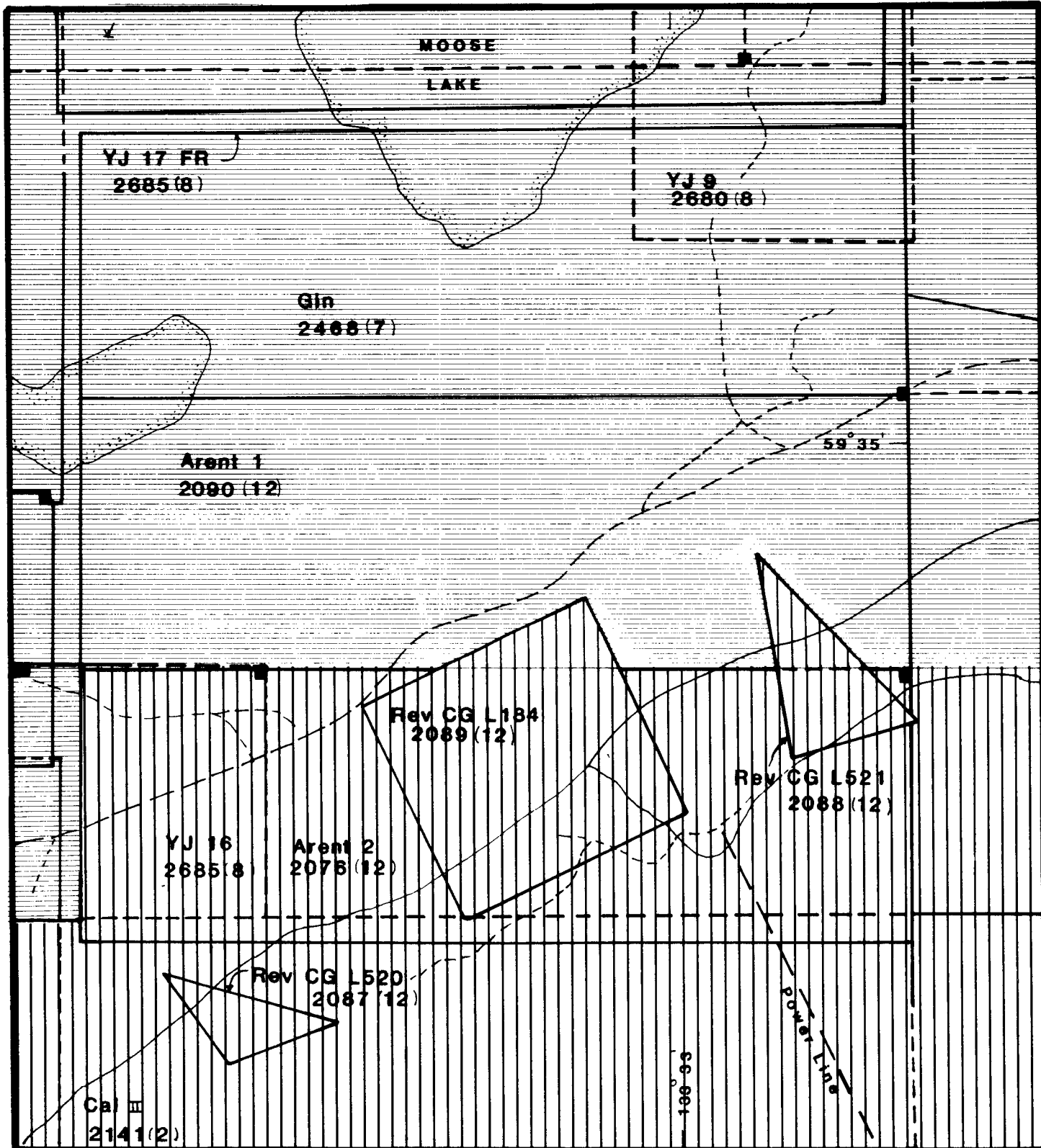
DATE  
12/86







FILE CODE


FIGURE 3a


Revised \_\_\_\_\_

104N/11,12



	roads		HMDC GROUP 1
	rivers		HMDC GROUP 2
	claim line		
	claim post		

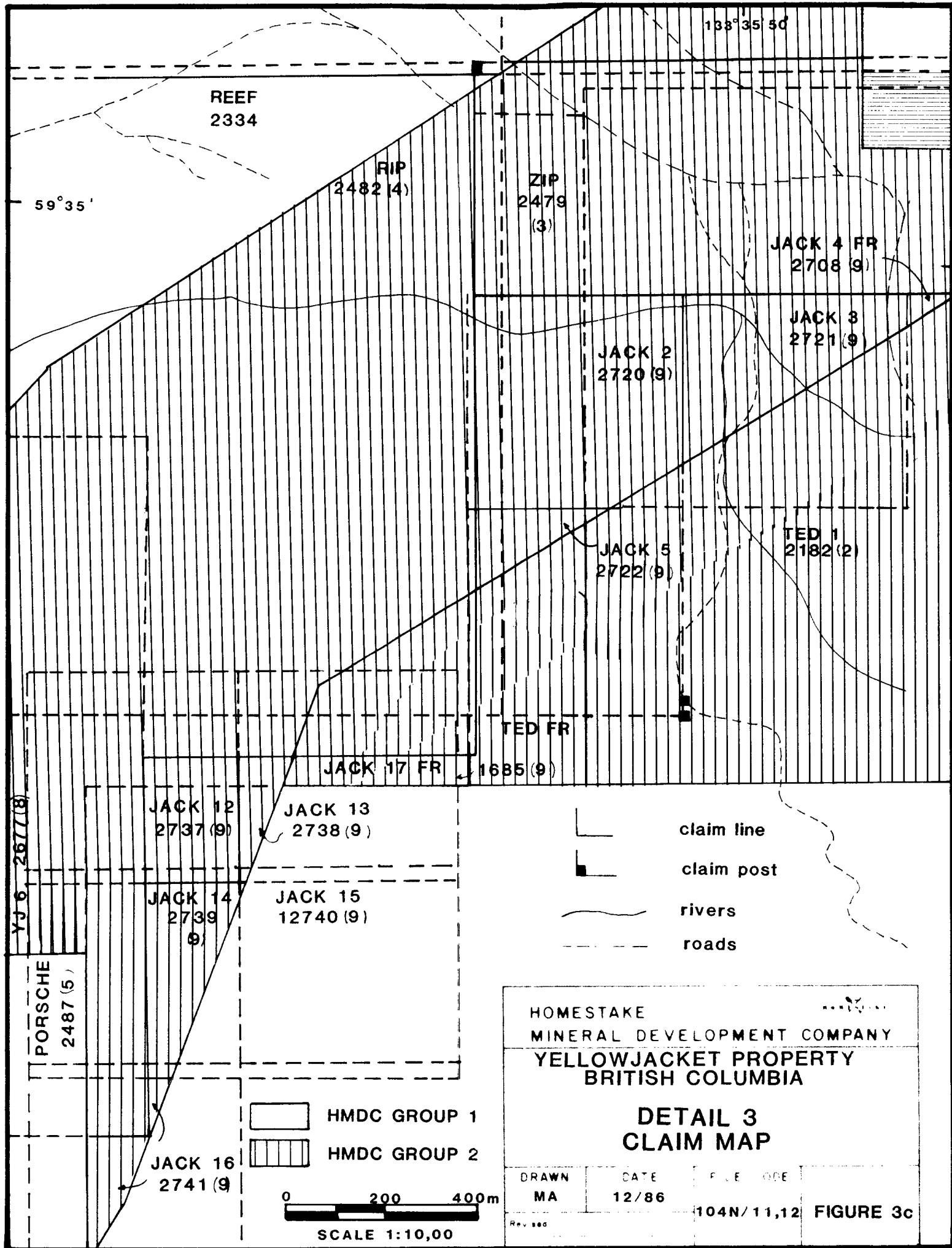
  
 SCALE 1:10,000



**HOMESTAKE  
 MINERAL DEVELOPMENT COMPANY**  
**YELLOWJACKET PROPERTY  
 BRITISH COLUMBIA**

**DETAIL 2  
 CLAIM MAP**

DRAWN MA	DATE 12/86	FILE CODE 104N/11,12
Revised _____		<b>FIGURE 3b</b>



1.2.3. Property Terminology

Throughout this report, the term "Yellowjacket Property" is used to describe those claims which are included in the North and South groups (see Appendix 6). The term "Yellowjacket Zone" is used in a much more limited sense to describe an area restricted to the Arent 1 and Arent 2 mineral claims, near the eastern end of their common boundary (see Figures 2, 4). It lies between diamond drill holes 86-8 and 86-10. It is believed that the "Yellowjacket Zone" corresponds to the original Yellowjacket Showing, discovered in 1899.

1.2.4 Economic Potential

Lode gold mineralization is contained within quartz veins and zones of silicification in altered serpentinites. The free gold is locally high grade but much work remains to be done in order to evaluate its economic potential.

The property is favourably situated, with a road through its center. It would be relatively easy to develop an infrastructure in this area if it were found to be warranted.

1.3 Work Completed

1.3.1. Diamond Drilling

During the period May 1986 to October 1986, 14 diamond drill holes were completed for a total of 2,250 meters. On a per-claim basis, the drilling was distributed as follows:

Arent 1:	330 m.
Arent 2:	329 m.
Wedge Fr:	450 m.
Beama:	627 m.
Tip:	381 m.
Cal 11:	133 m.

The diameter of most of the core drilled was 63.5 mm (HQ). In some instances it was necessary to reduce the size of the core to 47.6 mm (NQ) in order to continue a hole in difficult ground.

1.3.2. Airborne Geophysical Survey

An airborne geophysical survey which included total field magnetics and VLF EM was flown over much of the valley

of Pine Creek. In total, 657 line kilometers were flown. Of those, 256 kilometers were over claims covered by this report.

Survey specifications were:

nominal line spacing	125 m.
flight direction	343 degrees
mean terrain clearance	
VLF instrument	65 meters
magnetometer	63 meters

1.3.3. Line Cutting

89.4 kilometers of surface grid lines were cut. Of these, 88.2 km. were on claims covered by this report. The grid was used for geophysical surveys, geological mapping and locating drill holes.

Grid specifications were:

line spacing:	100 meters
station interval:	20 meters

1.3.4. Ground Geophysical Surveys

Magnetics and VLF

All of the grid was covered by a combined magnetometer and VLF EM survey. The magnetometer survey included measurements of both the total magnetic field and the magnetic field gradient.

IP Survey

Part of the grid, 6.56 km, was covered by an IP survey. Its purpose was to test the IP response of the mineralized zone.

1.3.5. Metallurgical Testing

A composite sample composed of 5 samples from DDH YJ 86-6, weighing a total of 15.176 kg, was subjected to preliminary metallurgical testing, in order to get an early indication as to whether there would be any problems in extracting the gold from the gangue minerals in a production situation.

## 1.4 General Geological Setting

The following discussion is adapted from that in Watkins and Atkinson (1985):

The Yellowjacket property lies near the western edge of the northwest trending Atlin Terrane, which is underlain by upper Paleozoic oceanic crust (Monger, 1975). It is correlated with the Cache Creek Group rocks of southern and central British Columbia. Within the Atlin Terrane basaltic flows are overlain by chert and thick, shallow-water carbonate rocks. Discordant granitic plutons range in age from late Jurassic to early Tertiary. Remnant Tertiary volcanic and sedimentary rocks are found throughout the area.

Within the Atlin Terrane, large ultramafic bodies define a discordant belt trending across the tectonic fabric of the terrane. The Yellowjacket Property lies at the contact of such an ultramafic body with greenstones of the Cache Creek Group, along a northeast trending fault in the valley of Pine Creek.

## 2. GEOPHYSICAL SURVEYS

### 2.1 Airborne Geophysical Survey

#### 2.1.1. Total Field Magnetism

##### Lithologic Expression

The area covered by the airborne survey is underlain by 3 major lithologic divisions, which have differing magnetic characteristics. Those three divisions are:

1. Pennsylvanian and Permian greenstones with intercalated sediments of the Cache Creek Group.
2. Serpentinized ultramafic intrusive rocks, the Atlin Intrusions, with ages roughly similar to the Cache Creek Group.
3. Jurassic granitic intrusions.

The Cache Creek rocks have a magnetic field strength of under 58,000 gammas, displaying a regular, smooth pattern of contours with few "bulls eyes".

The serpentinites have a field strength in the range 58,000 gammas to more than 59,000 gammas, and show an irregular pattern of contours with many "bulls eyes" centered on both strong highs and strong lows. The lows may represent zones of carbonate or quartz-carbonate alteration. It is also probable that at least some of the zones of lower magnetic susceptibility within the serpentinite are due to remnants of un-serpentinized pyroxenite.

The field strength of the Jurassic granitic rocks lies between about 58,000 gammas and 58,800 gammas, with a fairly regular contour pattern whose outlines approximate those of the intrusive bodies.

#### Structural Expression

At least two strong structural trends are high-lighted by the trends of magnetic highs related to serpentinites. The strongest such trend is displayed by an alignment of highs along Pine Creek at about 250 degrees. The individual highs themselves tend to be elongated at about 315 to 320 degrees. It may be that the 250 degree structure along Pine Creek is the locus of intrusion but that individual intrusions are controlled by 315 degree structures.

These structural trends are marked not just by magnetic highs but also by saddles, lows and abrupt changes in directions of contours.

A major zone of low field strength coincides with the valley of Spruce Creek, at about 305 degrees. It is the most distinct trend to be revealed by the entire survey. The significance of this is not fully understood but it may represent a major structural feature. It seems to separate two structural regimes, one to the northeast where the 250 degree and 315 degree trends are apparent and one to the southeast where the latter trends are not readily apparent.

It is interesting to note that the Yellowjacket mineralized zone is located near the intersection of the 250 degree Pine Creek structure and one of the 315 degree structures, on the flank of a strong magnetic high.

### 2.1.2. Vertical Gradient Magnetics

#### Lithologic Expression

The three major lithologic units distinguished by the total field magnetic map are equally apparent on the vertical gradient map. The gradient contours are relatively flat in the area underlain by Cache Creek rocks, ranging from -5 nT/m to +5 nT/m. In areas underlain by serpentinite the contours are complex, ranging from -20 nT/m to +50 nT/m. Many "bulls eyes", both low and high, are present.

#### Structural Expression

The 315 degree and 250 degree trends noted in the above discussion of the total field magnetics are also apparent in the vertical gradient contours. The Yellowjacket zone is at the intersection of a 315 degree and a 250 degree structure.

Another structural direction marked by gradient lows, is apparent at about 340 degrees. This trend is common everywhere on the map. Unfortunately, it is almost parallel to the flight lines, so there is some questions as to its validity.

A zone of near-zero magnetic gradient coincides with Spruce Creek.

### 2.1.3. VLF-EM

The only conductive rock type known to be in the survey area is graphitic argillite which forms part of the Cache Creek Group. It is believed that most of the VLF responses in the survey area are due either to these graphitic argillites or to structures, such as faults.

Most of the VLF responses have a general east-northeast trend. The fact that more northerly and northwesterly trends are not apparent is probably partly due to the choice of Hawaii as a transmitter station and the northwesterly direction of the flight lines.

The 250 degree structural trend along Pine Creek that was apparent in the magnetic data is confirmed by the VLF. One such response passes through or near the Yellowjacket Zone and may reflect the fault which localizes the zone.

South of Pine Creek are several VLF conductors with a trend of about 230 to 240 degrees. These may represent conductive horizons within the Cache Creek, probably graphitic argillites.

## 2.2 Ground Geophysical Survey

The ground geophysical survey included total field magnetic, magnetic gradient and VLF-EM surveys. Detailed specifications of the survey are provided in a report by A. Scott, included as Appendix 2 to this report. The purpose of the survey was to obtain detailed information on some of the features noted in the airborne work. It covered the same area as the cut grid, including the Yellowjacket Zone and part of the North and South claim groups.

The Arent Claims have been covered by an earlier magnetometer and VLF survey (Watkins and Atkinson, 1985). Coverage of the Arent Claims was repeated as part of the larger survey done for Homestake, as the earlier work had not revealed the same types of features as are apparent in the airborne geophysics, and because the earlier survey had not included any gradiometric information.



### 2.2.1. Results of Magnetometer Survey

Much of the area covered by the ground magnetic survey is believed to be underlain by serpentinite. Its magnetic expression is as noted from the airborne data, with a highly variable field strength in the range 58,000 gammas and a 59,000 gammas. Contour patterns are irregular, with many high or low "bulls eyes".

South and west of the serpentinite, areas underlain by greenstone and sediments show less magnetic relief, with a field strength in the range 57,200 to 58,100 gammas.

The Yellowjacket Zone lies in a magnetically low "embayment" in the serpentinite, on the flanks of a high.

Structural trends are more easily interpreted from the gradiometer map than from the total field map. The strongest directions of magnetic "lineaments" are similar to the two sets noted on the airborne maps, about 250 degrees and about 310-315 degrees. Those drill holes in which the best mineralization was encountered on the Yellowjacket zone are near an intersection of a 250 degree structure and a 310 degree structure.

### 2.2.2. Results of VLF Survey

For the purpose of interpretation the ground VLF results are viewed as contoured Fraser Filtered plots. The results confirm that within the grid area the strongest geophysical "lineament" trend is oriented at about 250 degrees. That trend is particularly evident in a high conductivity zone with a strike length of about 2 km. which passes 25 m. to 75 m. south of the Yellowjacket zone.

Another set of conductivity highs tends to be oriented at about 270 degrees. Lineaments of this set intersect lineaments of the 250 degree trend at several locations but apparently do not displace it.

One feature evident in the VLF data that was not brought out by any of the other surveys is a tendency for series of conductivity highs to be aligned at about 220 degrees. Each individual high is elongated in the 250 degree or the 270 degree direction but the centroids of the highs tend to line up with each other at about 220 degrees. EM lineaments with this trend appear in some instances to displace or disrupt lineaments with the 270 degree trend, but not those with the 250 degree trend.

### 2.3 IP Test Survey

6.26 kilometers of IP survey were completed over the Yellowjacket Zone on parts of the Arent 1, Arent 2, Wedge Fraction and Beama claims. The purpose of these test was to determine whether the mineralized zone has an IP signature.

In fact, the mineralized zone has no IP signature. It is an area of anomalously low chargeability, less than 5 millivolts/volt, and moderate resistivity, in the range of 150 to 500 ohm meters. South of the mineralized zone, chargeabilities and resistivities are moderate to high, while north of it chargeabilities are low to moderate.

The IP survey specifications and results are discussed in a report by Alan Scott that is attached as Appendix 3 to this report.

### 3. DIAMOND DRILLING

Drill logs are included as Appendix 5 of this report. Simplified sectional views of the drill holes appear as Figures 5a through 5n.

Brief summaries of the results follow:

#### 3.1 Lithologies

Twelve distinct lithologic units have been defined in drill core. These are summarized here. More detailed descriptions are found in the drill logs.

1. Basalt: Rocks tentatively identified as basalt were found in only two holes, YJ 86-17 and YJ 86-19. Some of the "greenstones" of other holes may in fact be altered basalts.

The basalts are very fine grained, dark green, highly chloritized rocks that are usually adjacent to mafic or ultramafic intrusive rocks. Veins and fracture coatings of serpentine are common within the basalt, but the serpentine is not pervasive, as it is in the ultramafics.

2. Serpentinite: Serpentinite was encountered in almost every drill hole. It is a product of the alteration of ultramafic rocks and in many instances serpentinite can be seen to grade in to less altered pyroxenite or dunite. It is characteristically highly magnetic, containing up to 10% magnetite.

The most common serpentine mineral present is antigorite, with lesser lizardite and a few seams of chrysotile.

3. Completely Altered:

Most of the drill core shows some evidence of alteration. In those instances in which the original minerals present have been completely removed or replaced by alteration the rocks are assigned to unit 3. The one exception to this is serpentinite, which although strictly speaking an alteration of ultramafic rocks, is considered a rock type in its own right.

The types of alteration which most commonly completely change the rock are carbonatization and silicification. In the case of carbonatization, serpentinite is altered to magnesite or magnesian dolomite, with variable amounts of talc, tremolite and quartz.

Pervasive silicification is much less common than carbonate alteration, and also less common than quartz veining, but it is found locally in some of the volcanic rocks, and extensively within serpentinite in holes DDH YJ 86-15, and YJ 86-16.

Other alteration minerals noted locally are brucite, sericite, chlorite, biotite and mariposite, but none of these ever completely replace original rock types.

4. Mafic Intrusive Rocks:

- 4a. Diabase: Diabase dikes have been noted in most of the drill holes in the Yellowjacket Zone and elsewhere. Diabase, together with gabbro, is one of the major rock types in holes DDH YJ 86-15 and DDH YJ 86-16.

The degree of alteration of diabase is highly variable. In the Yellowjacket Zone most of it shows some evidence of chloritization, carbonatization and locally silicification. In holes 15 and 16 there are numerous veins of white, unmineralized bull quartz.

- 4b. Gabbro: Gabbro was encountered mainly in holes 15 and 16, where thick sections of gabbro and diabase alternate. The mode of occurrence suggests a massive gabbro cut by numerous diabase dikes. The gabbro is relatively unaltered except for abundant, unmineralized white veins of bull quartz.

5. Feldspar Porphyry: Feldspar Porphyry, seen in holes 9, 12 and 17, is usually a very finely crystalline to aphanitic green rock with up to 10% millimetric feldspar phenocrysts. It is probably andesitic in composition.
6. Syenite: Rocks identified as syenite in holes 13 and 16 are dikes composed primarily of feldspar with variable amounts of biotite and/or hornblende. They are not intensely altered.
7. Diorite: A 1-meter dike in hole 18 is dioritic in composition and texture.
8. Greenstone: Greenstone is used as an all-inclusive field term for chloritized volcanic rocks which may range in composition from basalt to andesite. The term was used only where a more diagnostic description was not possible.
9. Andesite: Rocks identified as andesite are fine grained green volcanic rocks made up primarily of plagioclase feldspar with 10% to 15% quartz and a mafic suite that may include hornblende, chlorite and/or biotite. Holes 11, 12 and 15 encountered significant intersections of andesite.  
  
For the purpose of logging, two sub-units of andesite have been distinguished, based on the predominant phenocrysts. These are 9a, Hornblende Andesite, and 9b, Andesite Feldspar Porphyry.
10. Pyroxenite: Locally, remnants of unserpentinized pyroxenite are found within serpentinites. This is not common in the Yellowjacket Zone but is more so in the area of holes 15 and 16.
11. Graphitic Chert: In one drill hole, 86-19, very minor graphitic chert was encountered. Its presence may be the explanation for a VLF EM anomaly which was the target for that drill hole.
12. Argillites: About 1 meter of locally graphitic argillite was encountered in hole 19.

### 3.2 Structural Geology

Within the Yellowjacket Zone, all of the rocks have been subjected to several episodes of brittle fracturing. The detailed history of this deformation has not been worked out.

There are at least 3 stages of fracturing healed by veins. The vein mineralogies are highly variable from place to place, with calcite, iron or magnesian carbonates, talc and quartz being the most common. In different places, any one of these vein types can be seen to cross-cut any of the others, indicating that the paragenesis of the veins is complex.

Following emplacement of the veins was at least one episode of fracturing that has not healed, leaving the rocks in the Yellowjacket Zone shattered and broken. Densities of unhealed fractures are commonly as high as 50 per meter in drill core. It is not possible to determine the geometry of the fault systems from the chaotic fracturing of the core. Their overall geometry is more easily interpreted from geophysical information.

It is believed that the brittle information of rocks in the Yellowjacket Zone was produced by movement along an east-northeast fault system paralleling Pine Creek, and along associated cross-faults. Early brittle deformation created the fracture permeability which provided channelways for hydrothermal fluids.

No conclusive evidence of ductile deformation has been noted anywhere in the drill core.

### 3.3 Mineralization

Mineralization in the Yellowjacket Zone consists of coarse gold contained in quartz veinlets. Typical gold-bearing quartz veinlets are bluish grey, one or two centimeters in thickness and enveloped with a centimeter or so of "bleaching". The "bleaching" is most probably sericitization.

Gold mineralization grading 3 g. Au/tonne or better over significant widths is situated in those zones in which the quartz veinlets are frequent enough to form a stockwork. Some of the gold is visible and most of the gold particles are greater than 150 microns in size.

The gold is not directly associated with sulphide minerals. There may be a slight increase in pyrite content of the rock, from a background of only traces to 1% or 2%, in the vicinity of gold mineralization, but pyrite is not a reliable guide. Other minerals found in small amounts in the vicinity of gold are arsenopyrite and gersdorffite. Millerite has been noted in altered ultramafic rocks but has no apparent correlation with gold.

The most significant gold mineralization is in volcanic rocks or dike rocks, which are brittle and susceptible to fracturing. Serpentinites, even carbonatized ones, are not preferred hosts for gold, although some of the best intersections have been at or near volcanic/serpentinite contacts. Only in hole 9 was a significant gold intersection obtained within quartz-carbonate altered serpentinite; 7.2 g. Au/tonne over 1.52 m.

Table 1 summarizes the best gold intersections from holes 86-6 through 86-19. Detailed assay information is available in the logs, attached to this report as Appendix 5.

TABLE 1  
SUMMARY OF ASSAY RESULTS

(Some of the assay results reported below are composites of more than one assay interval)

<u>Hole No.</u>	<u>from</u>	<u>meters to</u>	<u>length</u>	<u>g Au te</u>
DDH 86-6	76.63	80.77	4.15	1.34
	85.34	88.39	3.05	17.93
	108.81	111.86	3.05	4.70
DDH 86-7	41.61	44.50	2.90	7.78
DDH 86-8	59.13	63.25	4.11	0.37
DDH 86-9	50.75	54.10	3.35	10.73
	61.26	62.79	1.52	7.20
DDH 86-10	40.39	41.45	1.07	0.51
	65.23	66.75	1.52	0.82
DDH 86-11	182.00	187.40	5.40	0.59
DDH 86-13	115.35	116.43	1.08	1.75
DDH 86-14	32.00	34.00	2.00	0.48
	89.20	92.46	3.26	0.40
DDH 86-15	17.75	19.70	1.95	0.31
	92.80	94.80	2.00	0.31
DDH 86-16	1.83	4.00	2.17	0.31

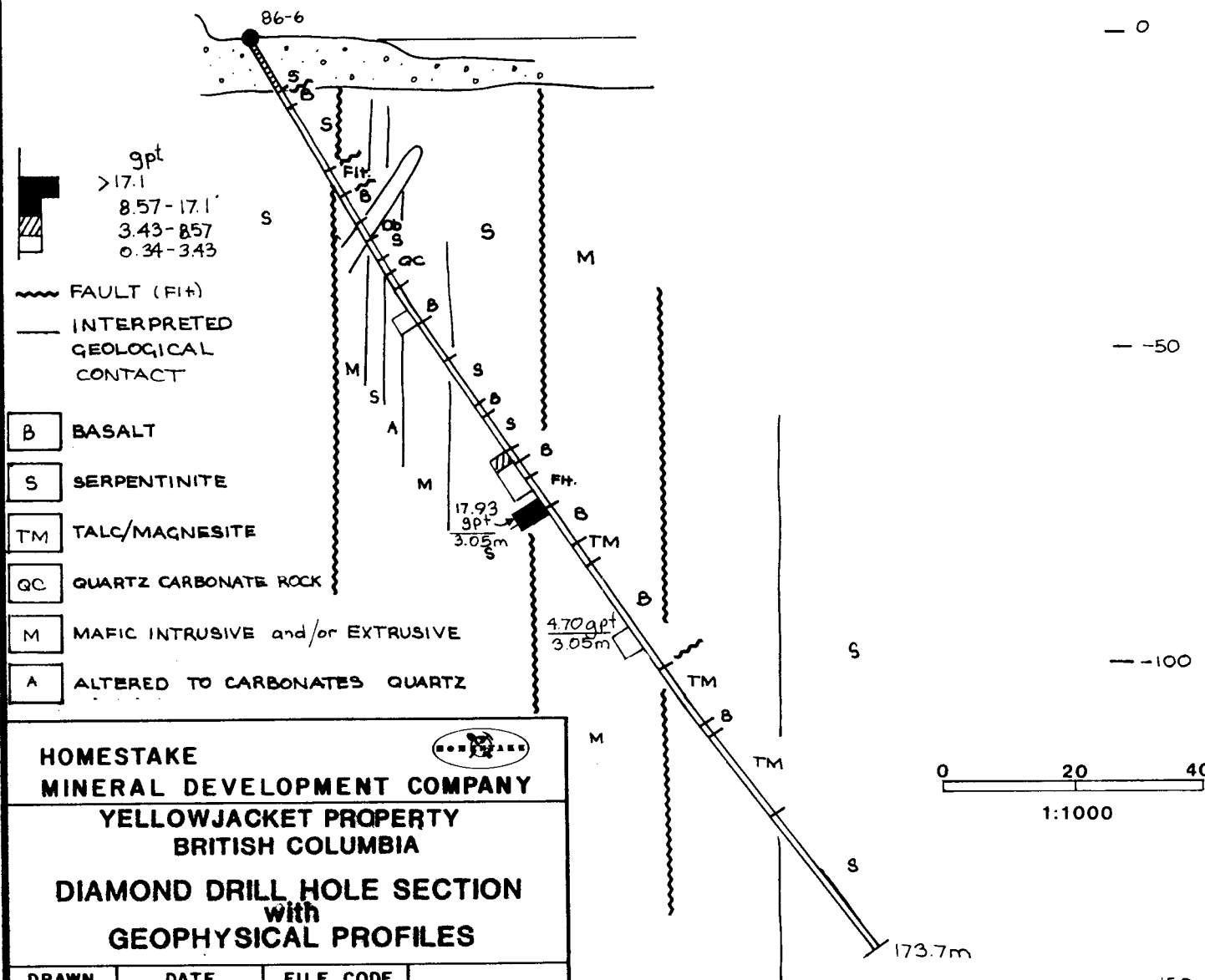
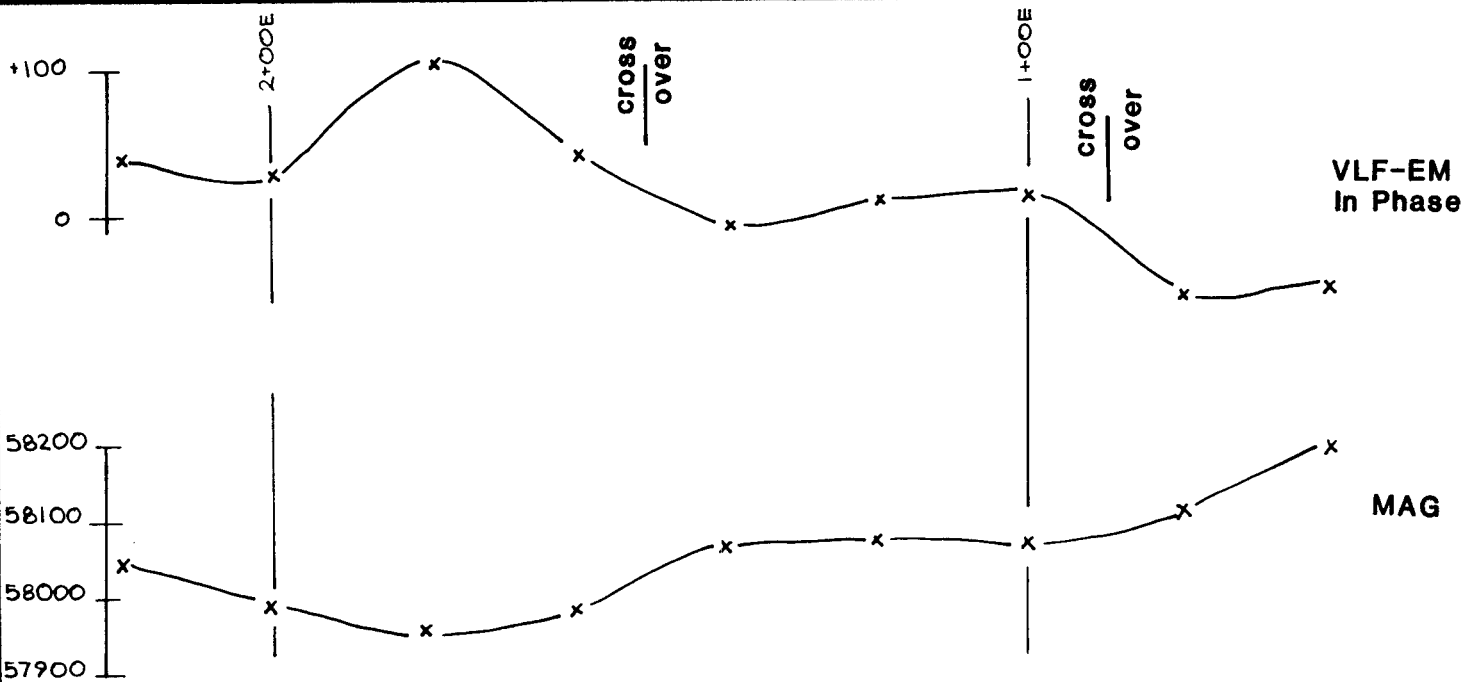
#### 4. METALLURGICAL ASSESSMENT

Homestake arranged for some preliminary metallurgical testing of a composite sample of mineralized drill core from DDH YJ 86-6. The purpose of this early testing was to determine in advance whether gold can be extracted from these mineralized rocks using conventional metallurgical techniques.

To obtain a sample for metallurgical testing, laboratory rejects for assay samples 6-48 through 6-52 inclusive were obtained from Bondar Clegg and Company Ltd. These represent a core interval of 7.62 meters and together weighed 15,176 grams as received at Lakefield Research.

Testing was done by Lakefield Research, as requested by John W. Fisher, a consulting engineer acting on behalf of Homestake. The initial results indicate the gold to be free-milling and easily recoverable by means of gravity concentration and flotation. An overall recovery of 95% of the gold was obtained.

A brief summary by Mr. Fisher is included as Appendix 4 to this report.

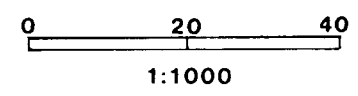


gpt  
 >17.1  
 8.57-17.1  
 3.43-8.57  
 0.34-3.43

- FAULT (Fit)
- INTERPRETED GEOLOGICAL CONTACT
- B** BASALT
- S** SERPENTINITE
- TM** TALC/MAGNESITE
- QC** QUARTZ CARBONATE ROCK
- M** MAFIC INTRUSIVE and/or EXTRUSIVE
- A** ALTERED TO CARBONATES QUARTZ

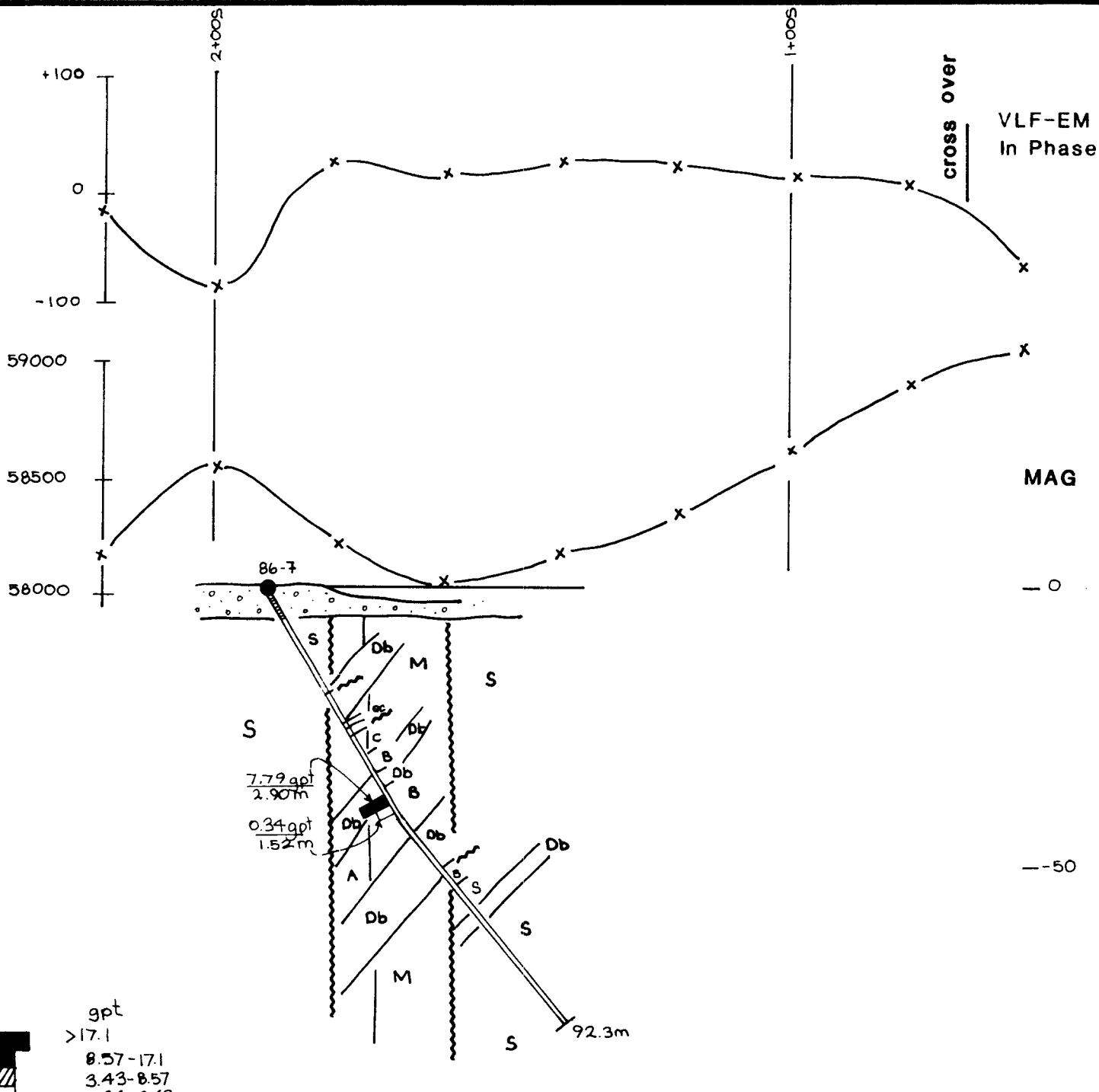
**HOMESTAKE**  
**MINERAL DEVELOPMENT COMPANY**  
 YELLOWJACKET PROPERTY  
 BRITISH COLUMBIA  
**DIAMOND DRILL HOLE SECTION**  
 with  
**GEOPHYSICAL PROFILES**

DRAWN MA	DATE 07/86	FILE CODE 104N/12	FIGURE 5A
Revised			



DRILL SECTION ON LINE 14+30.5E  
 GEOPHYSICAL PROFILES ON LINE 14+00E





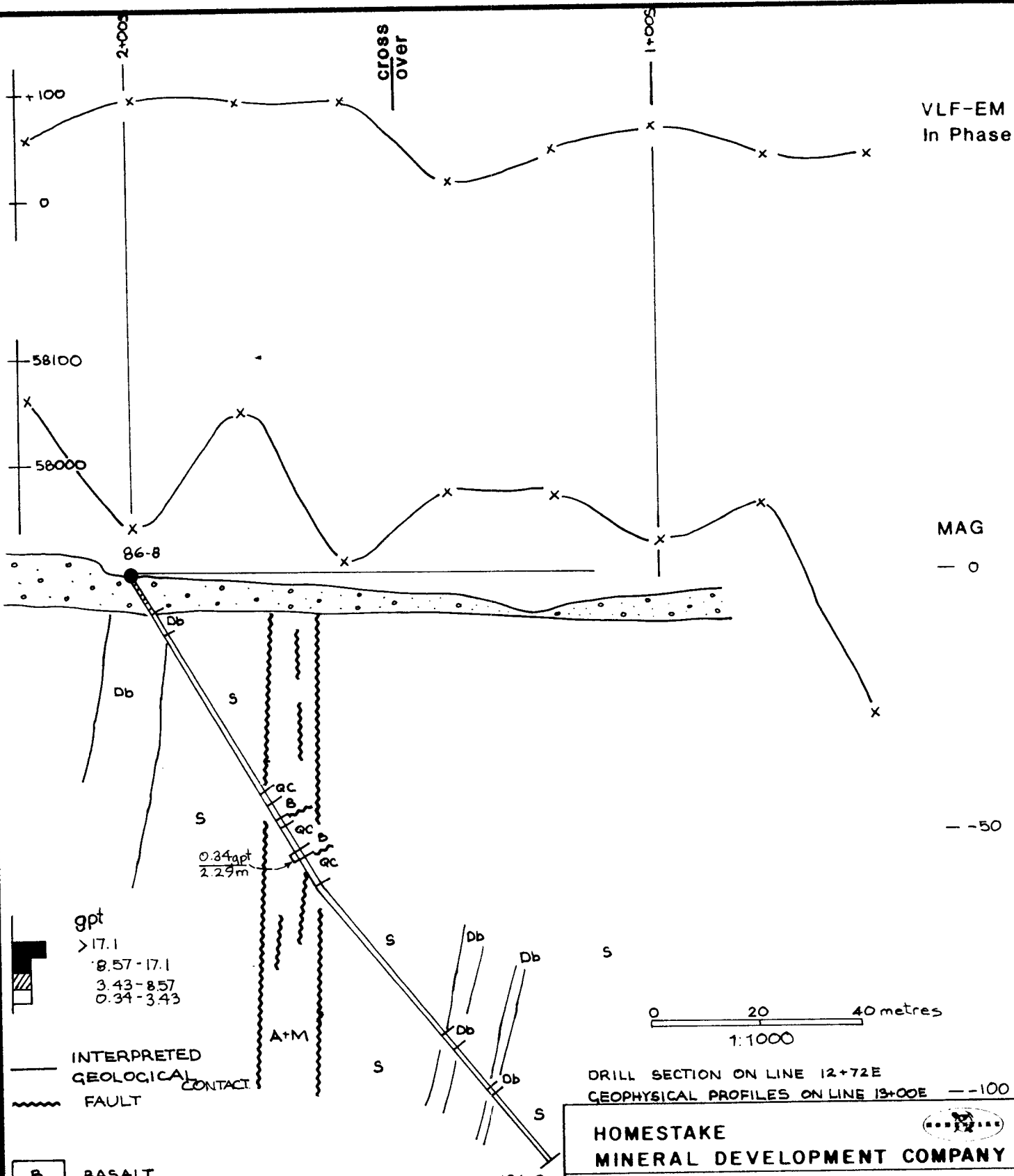
gpt  
 >17.1  
 8.57-17.1  
 3.43-8.57  
 0.34-3.43

~~~~~ FAULT  
 ——— INTERPRETED  
 ——— GEOLOGICAL CONTACT

- Db DIABASE
- S SERPENTINITE
- A ALTERED TO CARBONATES QUARTZ TALC
- B BASALT
- M MAFIC INTRUSIVE and/or EXTRUSIVE
- QC QUARTZ-CARBONATE ROCK

0 20 40 metres  
 1:1000  
 DRILL SECTION ON LINE 15+05.5E  
 GEOPHYSICAL PROFILES ON LINE 15+00E

|                                                                     |               |                      |                  |
|---------------------------------------------------------------------|---------------|----------------------|------------------|
| <b>HOMESTAKE</b><br><b>MINERAL DEVELOPMENT COMPANY</b>              |               |                      |                  |
| YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA                           |               |                      |                  |
| <b>DIAMOND DRILL SECTION</b><br>with<br><b>GEOPHYSICAL PROFILES</b> |               |                      |                  |
| DRAWN<br>MA                                                         | DATE<br>07 86 | FILE CODE<br>104N 12 | <b>FIGURE 5B</b> |
| Revised _____                                                       |               |                      |                  |



VLF-EM  
In Phase

MAG  
— 0

-- 50

gpt  
>17.1  
8.57-17.1  
3.43-8.57  
0.34-3.43

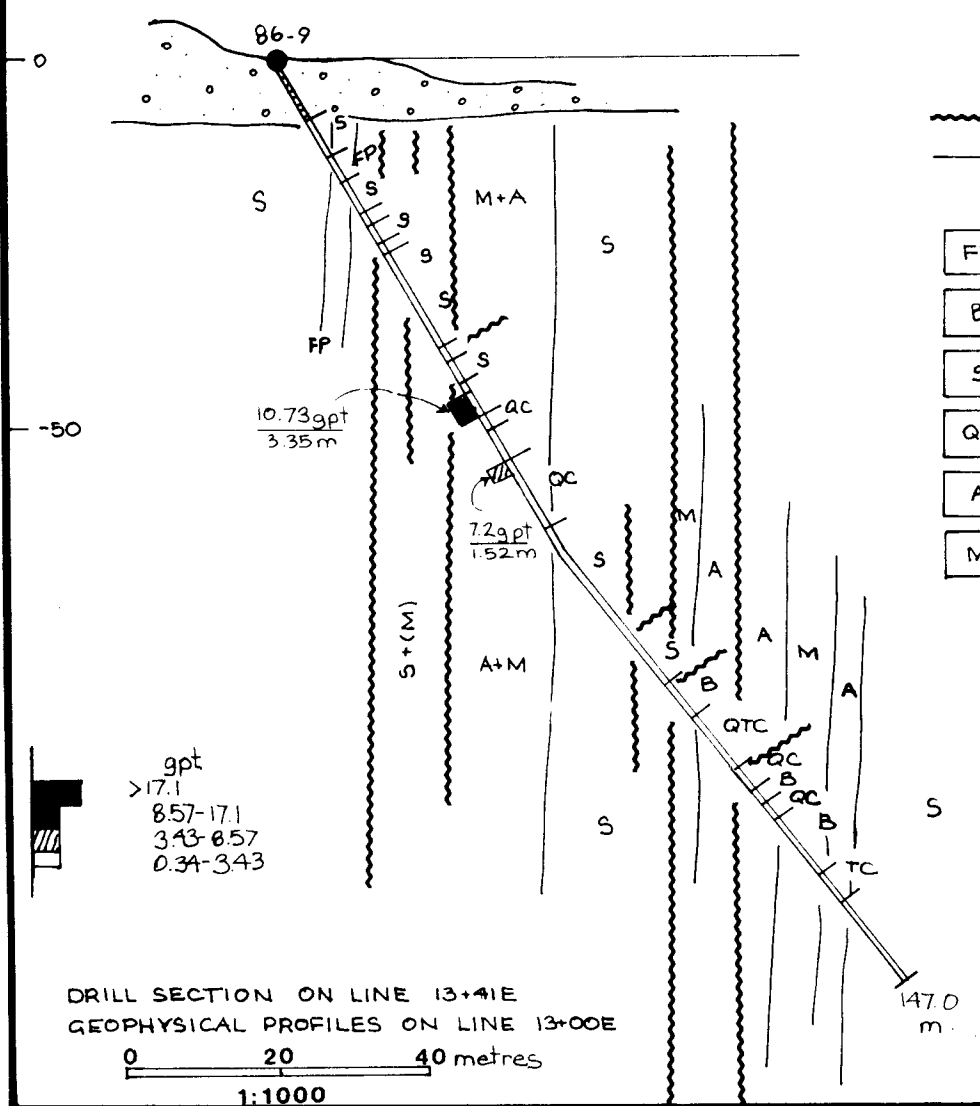
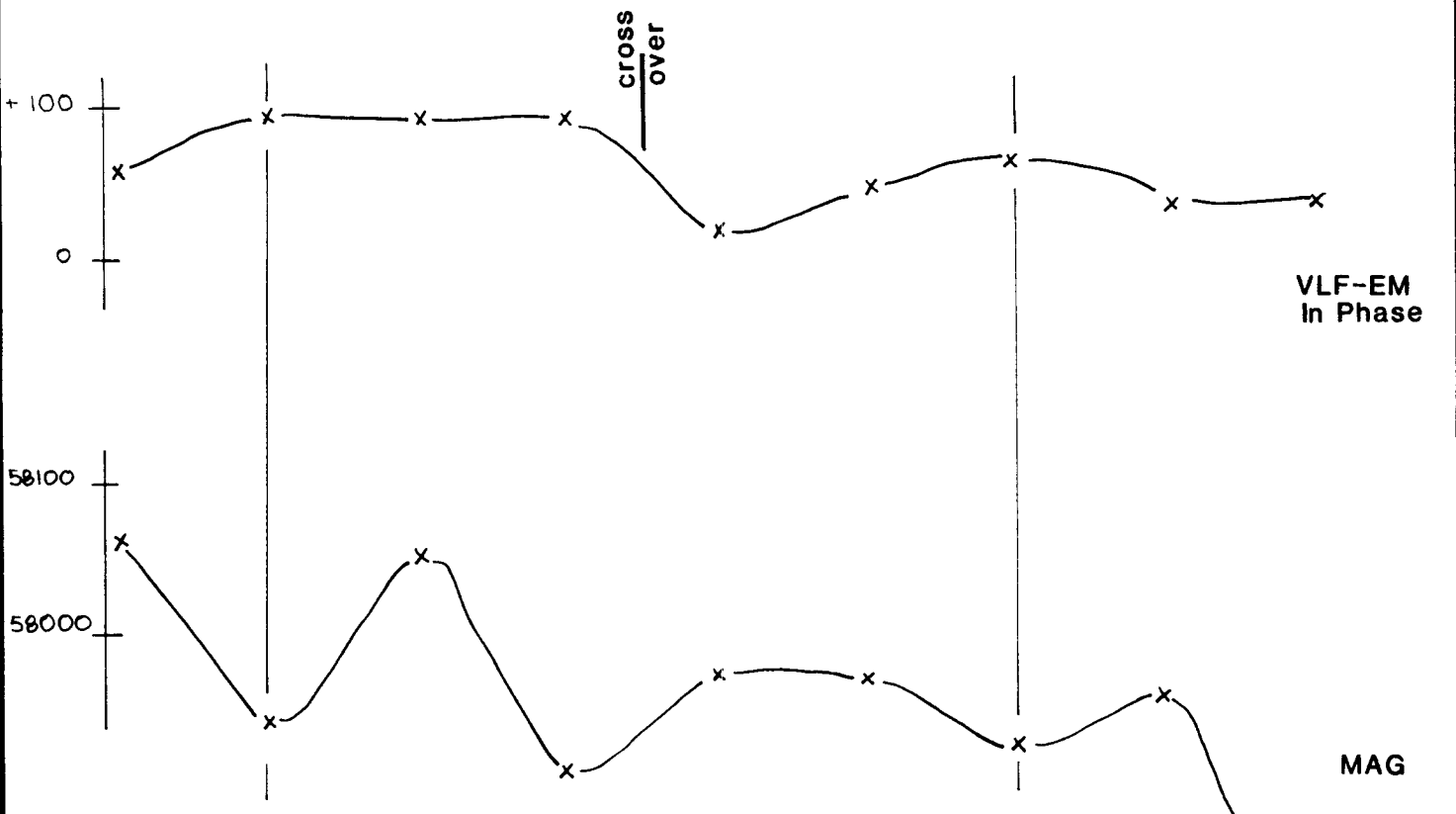
INTERPRETED  
GEOLOGICAL  
CONTACT  
FAULT

- B BASALT
- S SERPENTINITE
- Db DIABASE
- QC QUARTZ CARBONATE ROCK
- A ALTERED TO CARBONATES QUARTZ TALC
- M MAFIC INTRUSIVE and/or EXTRUSIVE

0 20 40 metres  
1:1000

DRILL SECTION ON LINE 12+72E  
GEOPHYSICAL PROFILES ON LINE 13+00E --100

|                                                               |               |                      |           |
|---------------------------------------------------------------|---------------|----------------------|-----------|
| <b>HOMESTAKE<br/>MINERAL DEVELOPMENT COMPANY</b>              |               |                      |           |
| <b>YELLOWJACKET PROPERTY<br/>BRITISH COLUMBIA</b>             |               |                      |           |
| <b>DIAMOND DRILL SECTION<br/>with<br/>GEOPHYSICAL PROFILE</b> |               |                      |           |
| DRAWN<br>MA                                                   | DATE<br>07 86 | FILE CODE<br>104N 12 | FIGURE 5C |
| Revised _____                                                 |               |                      |           |

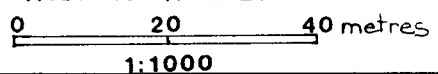


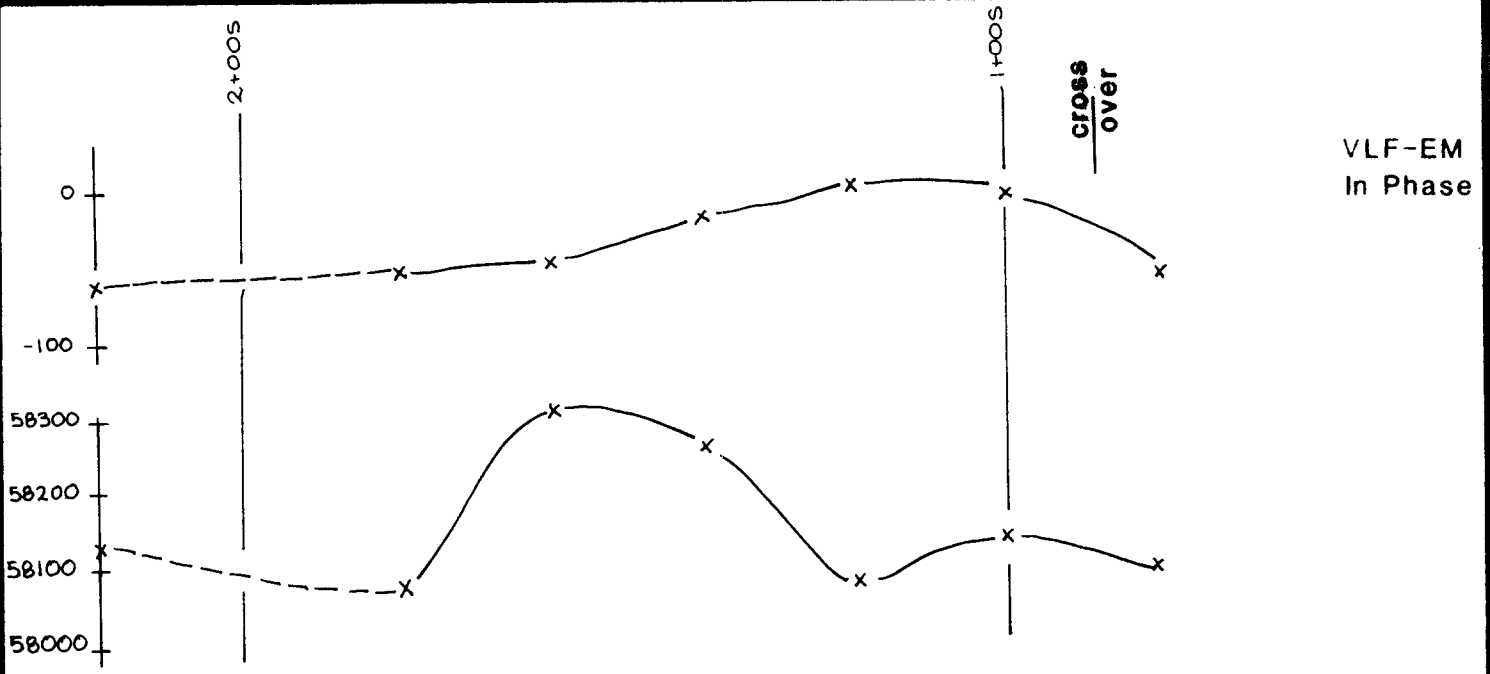
- FAULT
- INTERPRETED GEOLOGICAL CONTACT
- FELDSPAR PORPHYRY
- BASALT
- SERPENTINITE
- QUARTZ CARBONATE ROCK
- ALTERED TO CARBONATES
- MAFIC INTRUSIVE and/or EXTRUSIVE

gpt  
 >17.1  
 8.57-17.1  
 3.43-8.57  
 0.34-3.43

|                                                                                  |               |                         |
|----------------------------------------------------------------------------------|---------------|-------------------------|
| <b>HOMESTAKE</b>                                                                 |               |                         |
| <b>MINERAL DEVELOPMENT COMPANY</b>                                               |               |                         |
| <b>YELLOWJACKET PROPERTY<br/>         BRITISH COLUMBIA</b>                       |               |                         |
| <b>DIAMOND DRILL SECTION<br/>         with<br/>         GEOPHYSICAL PROFILES</b> |               |                         |
| DRAWN<br>MA                                                                      | DATE<br>07/86 | FILE CODE<br>104N/11,12 |
| Revised _____                                                                    |               | <b>FIGURE 5 D</b>       |

DRILL SECTION ON LINE 13+41E  
 GEOPHYSICAL PROFILES ON LINE 13+00E

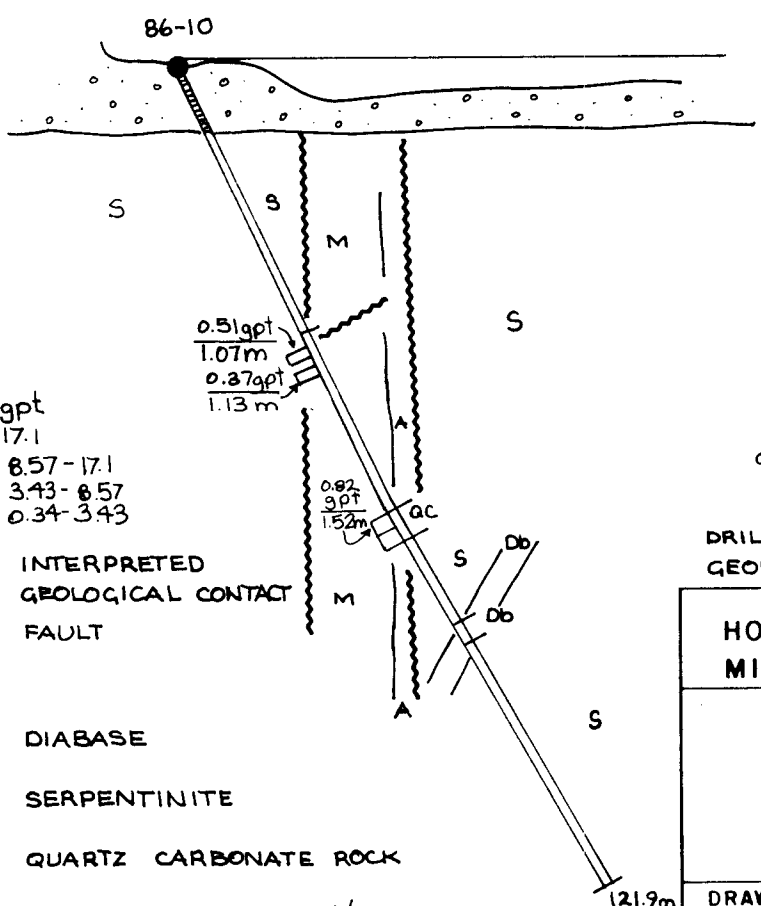




VLF-EM  
In Phase

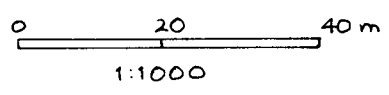


MAG



gpt  
>17.1  
8.57-17.1  
3.43-8.57  
0.34-3.43

- INTERPRETED GEOLOGICAL CONTACT
- ~~~~ FAULT
- Db DIABASE
- S SERPENTINITE
- QC QUARTZ CARBONATE ROCK
- M MAFIC INTRUSIVE and/or EXTRUSIVE
- A ALTERED TO CARBONATES QUARTZ TALC



DRILL SECTION ON LINE 15+67E  
GEOPHYSICAL PROFILES ON LINE 16+00E

|                                                                |               |                      |                  |
|----------------------------------------------------------------|---------------|----------------------|------------------|
| <b>HOMESTAKE<br/>MINERAL DEVELOPMENT COMPANY</b>               |               |                      |                  |
| YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA                      |               |                      |                  |
| <b>DIAMOND DRILL SECTION<br/>with<br/>GEOPHYSICAL PROFILES</b> |               |                      |                  |
| DRAWN<br>MA                                                    | DATE<br>07 86 | FILE CODE<br>104N 12 | <b>FIGURE 5E</b> |
| Revised _____                                                  |               |                      |                  |

AU  
gpt/metres

0.11/7.65

0.12/3

0.17/1.22

0.59/5.4

0.14/2

YELLOWJACKET PROPERTY

DDH YJ-86-11

GOLD ASSAY

5Fe

LEGEND

LITHOLOGIC TYPES

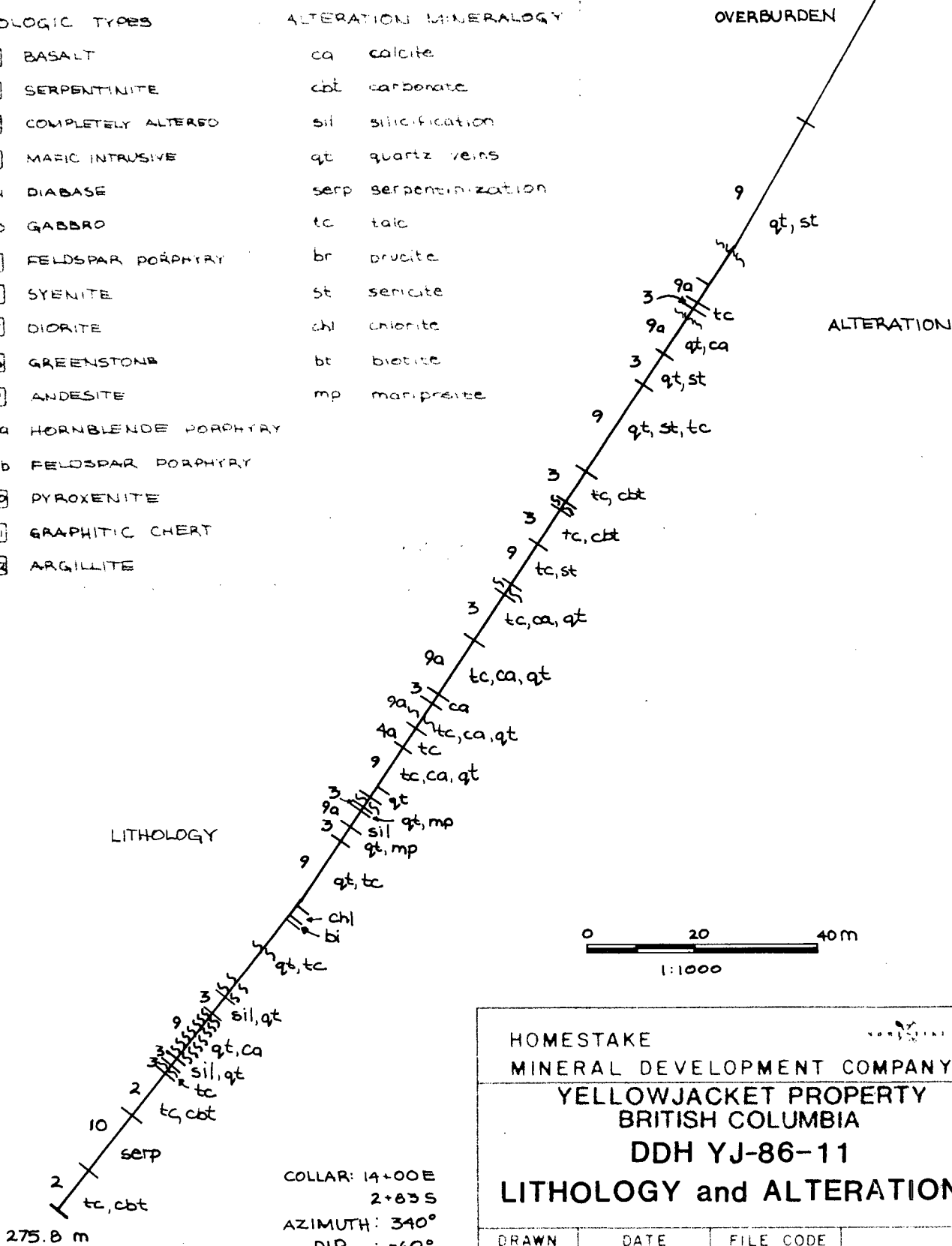
- 1 BASALT
- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 5 FELDSPAR PORPHYRY
- 6 SYENITE
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY
- 10 PYROXENITE
- 11 GRAPHITIC CHERT
- 12 ARGILLITE

ALTERATION MINERALOGY

- ca calcite
- cbl carbonate
- sil silicification
- qt quartz veins
- serp serpentinization
- tc talc
- br brucite
- st sericite
- chl chlorite
- bt biotite
- mp malaprosite

OVERBURDEN

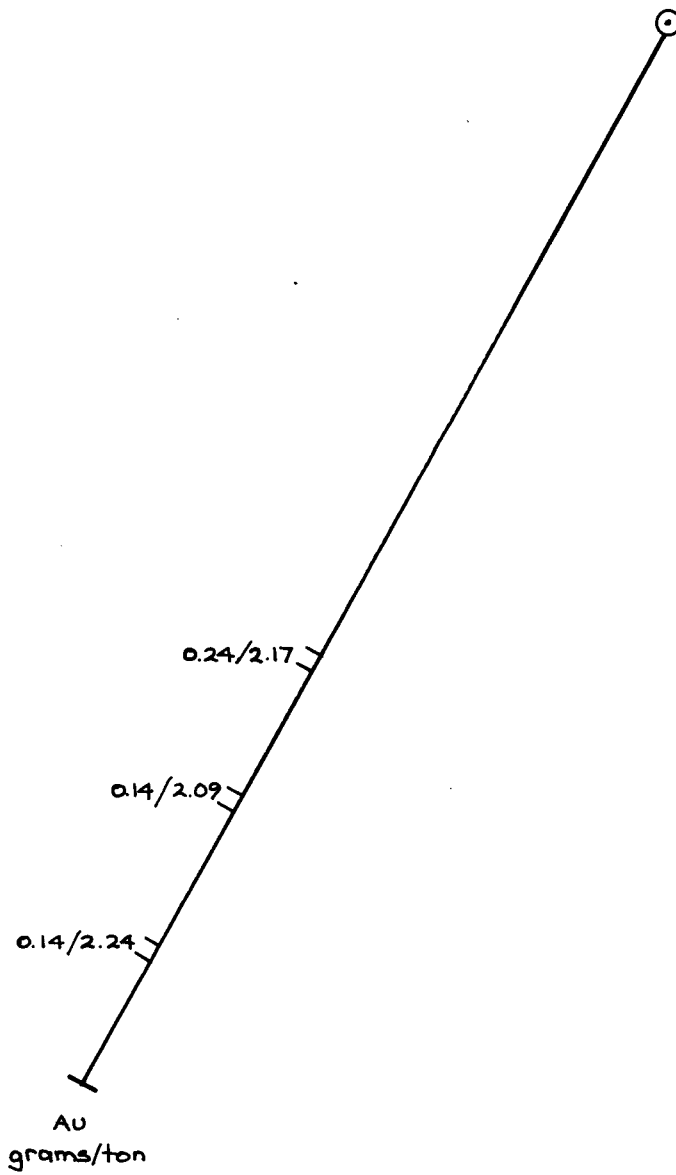
ALTERATION



|                                                                                                                                          |                |                      |                   |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------|-------------------|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY<br>YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA<br>DDH YJ-86-11<br><b>LITHOLOGY and ALTERATION</b> |                |                      |                   |
| DRAWN<br>MA                                                                                                                              | DATE<br>11 '86 | FILE CODE<br>104N/12 | <b>FIGURE 5Fb</b> |
| Revised _____                                                                                                                            |                |                      |                   |

COLLAR: 14+00E  
 2+83S  
 AZIMUTH: 340°  
 DIP : -60°

275.8 m



YELLOWJACKET PROPERTY

DDH YJ-86-12

GOLD ASSAYS

5Gg

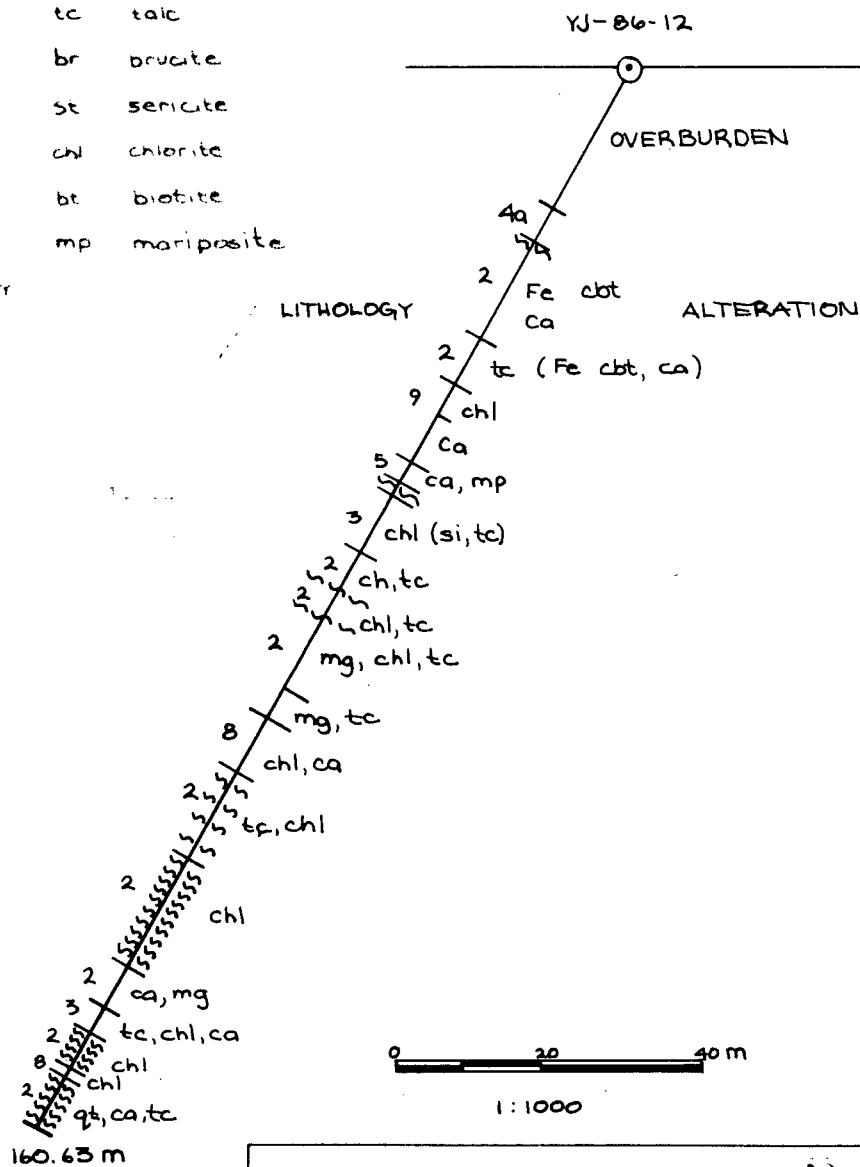
LEGEND

LITHOLOGIC TYPES

- 1 BASALT
- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 5 FELDSPAR PORPHYRY
- 6 SYENITE
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY
- 10 PYROXENITE
- 11 GRAPHITIC CHEST
- 12 ARGILLITE

ALTERATION MINERALOGY

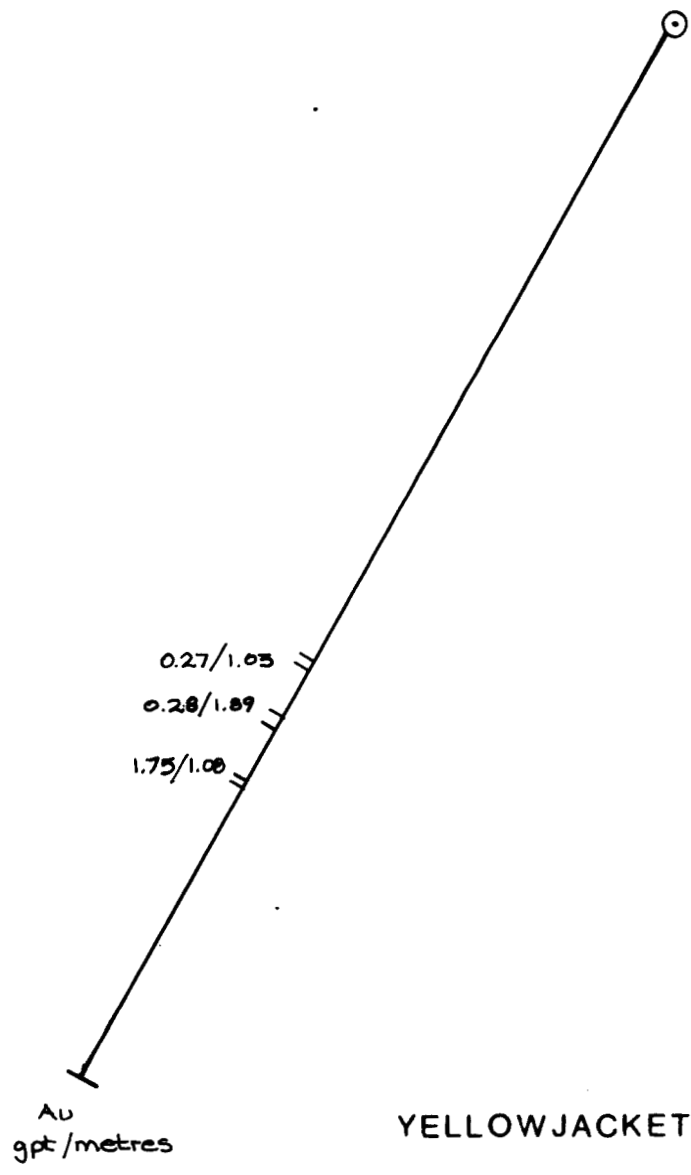
- ca calcite
- cbt carbonate
- sil silicification
- qt quartz veins
- serp serpentinization
- tc talc
- br brucite
- st sericite
- chl chlorite
- bt biotite
- mp mariposite



COLLAR: 11+66 E  
2+24 S  
AZIMUTH: 340°  
DIP: -60°

|                                                                                                                                   |               |                      |            |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|------------|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY<br>YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA<br>DDH YJ-86-12<br>LITHOLOGY and ALTERATION |               |                      |            |
| DRAWN<br>MA                                                                                                                       | DATE<br>11/86 | FILE CODE<br>104N/12 | FIGURE 5Gb |
| Revised _____                                                                                                                     |               |                      |            |





YELLOWJACKET PROPERTY

DDH YJ-86-13

5Ha

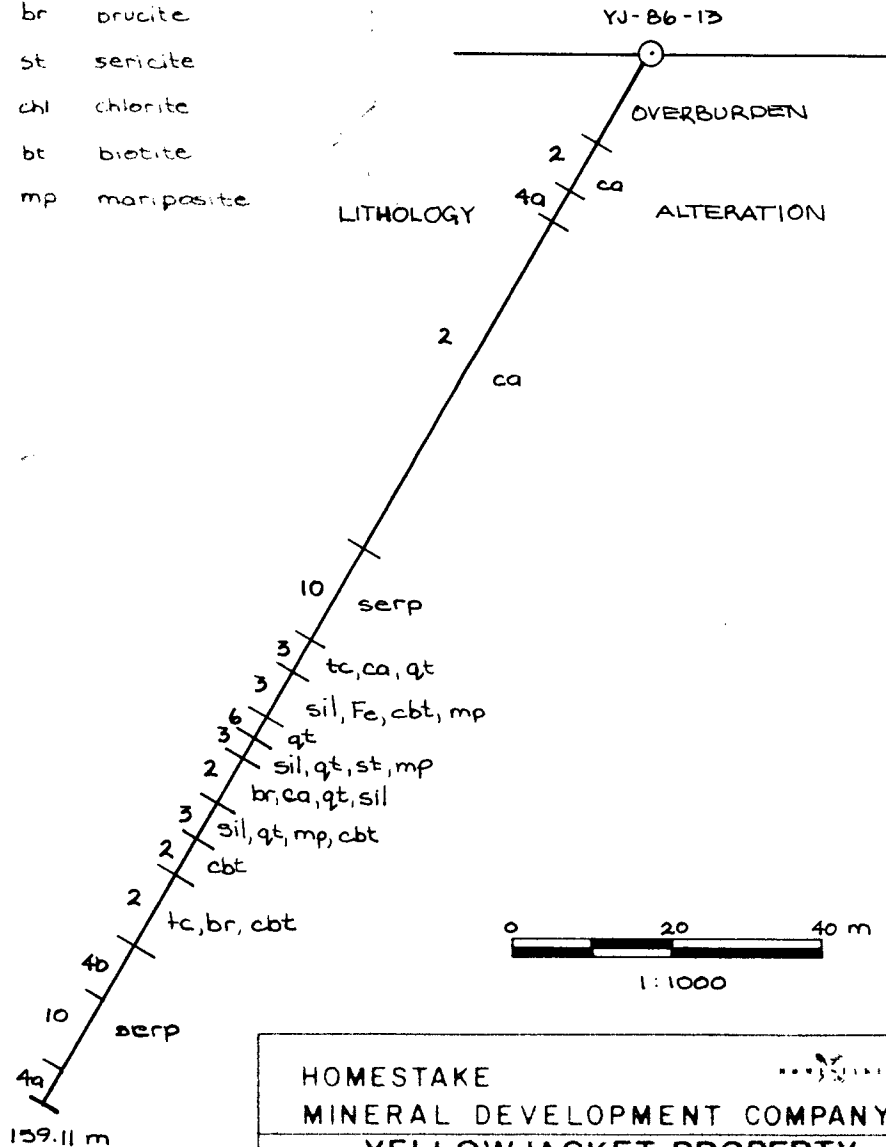
LEGEND

LITHOLOGIC TYPES

- 1 BASALT
- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 5 FELDSPAR PORPHYRY
- 6 SYENITE
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY
- 10 PYROXENITE
- 11 GRAPHITIC CHERT
- 12 ARGILLITE

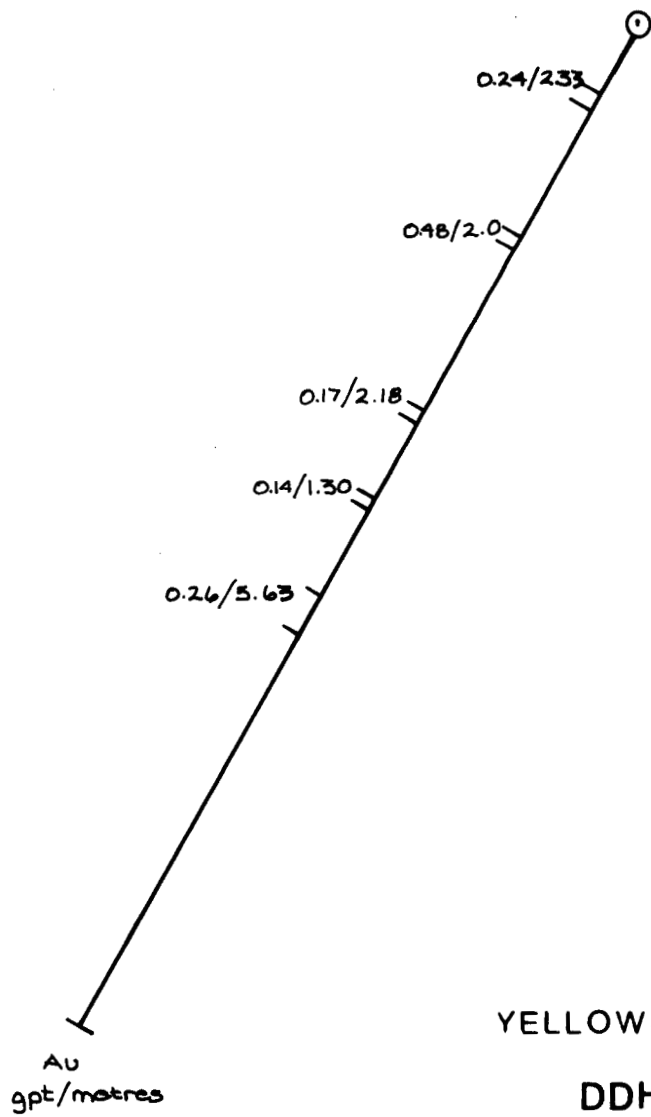
ALTERATION MINERALOGY

- ca calcite
- cbt carbonate
- sil silicification
- qt quartz veins
- serp serpentinization
- tc talc
- br brucite
- st sericite
- chl chlorite
- bt biotite
- mp malpasite



COLLAR: 18+50E  
 1+80S  
 AZIMUTH: 340°  
 DIP: -60°

|                                                                                       |                |                      |            |
|---------------------------------------------------------------------------------------|----------------|----------------------|------------|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY<br>YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA |                |                      |            |
| DDH YJ-86-13<br>LITHOLOGY and ALTERATION                                              |                |                      |            |
| DRAWN<br>MA                                                                           | DATE<br>11 '86 | FILE CODE<br>104N/12 | FIGURE 5Hb |
| Revised _____                                                                         |                |                      |            |



YELLOWJACKET PROPERTY

DDH YJ-86-14  
GOLD ASSAYS

5 Ia

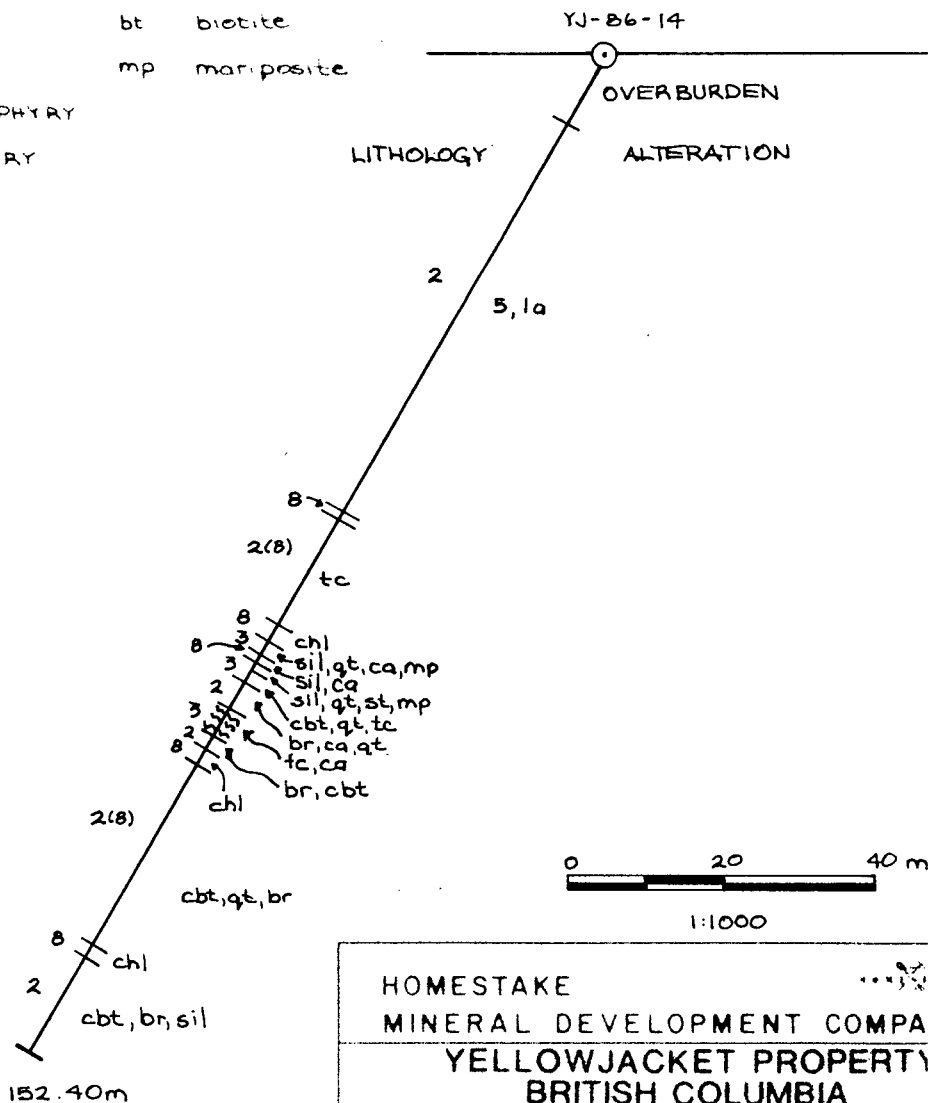
LEGEND

LITHOLOGIC TYPES

- 1 BASALT
- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 5 FELDSPAR PORPHYRY
- 6 SYENITE
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY
- 10 PYROXENITE
- 11 GRAPHITIC CHERT
- 12 ARGILLITE

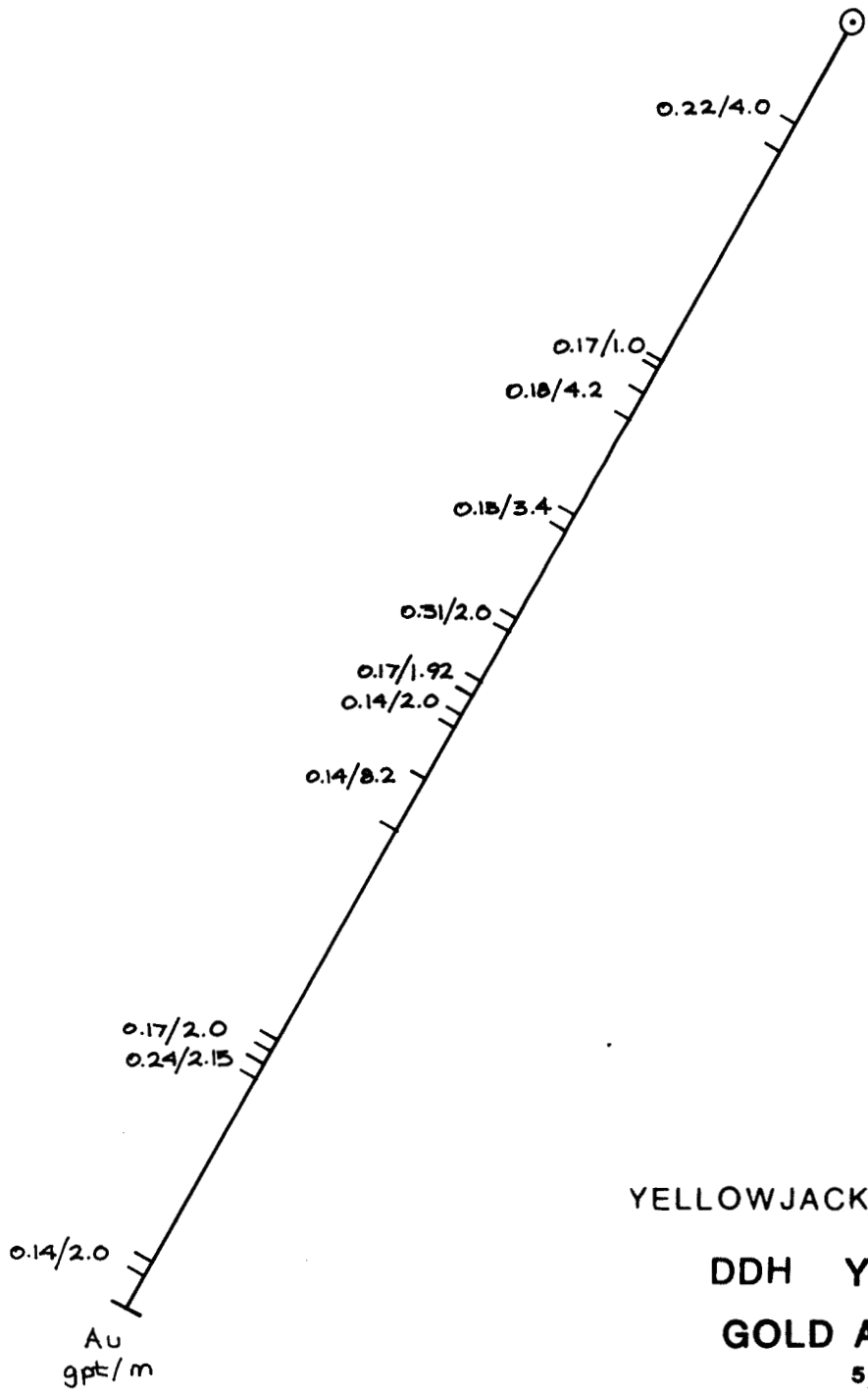
ALTERATION MINERALOGY

- ca calcite
- cbt carbonate
- sil silicification
- qt quartz veins
- serp serpentinization
- tc talc
- br brucite
- st sericite
- chl chlorite
- bt biotite
- mp mariposite



COLLAR : 21+79E  
 1+805  
 AZIMUTH: 340°  
 DIP : -60°

|                                                                                                                                   |               |                      |           |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|-----------|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY<br>YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA<br>DDH YJ-86-14<br>LITHOLOGY and ALTERATION |               |                      |           |
| DRAWN<br>MA                                                                                                                       | DATE<br>11 86 | FILE CODE<br>104N/12 | FIGURE 5D |
| Revised _____                                                                                                                     |               |                      |           |



YELLOWJACKET PROPERTY

DDH YJ-86-15

GOLD ASSAYS

5Ja

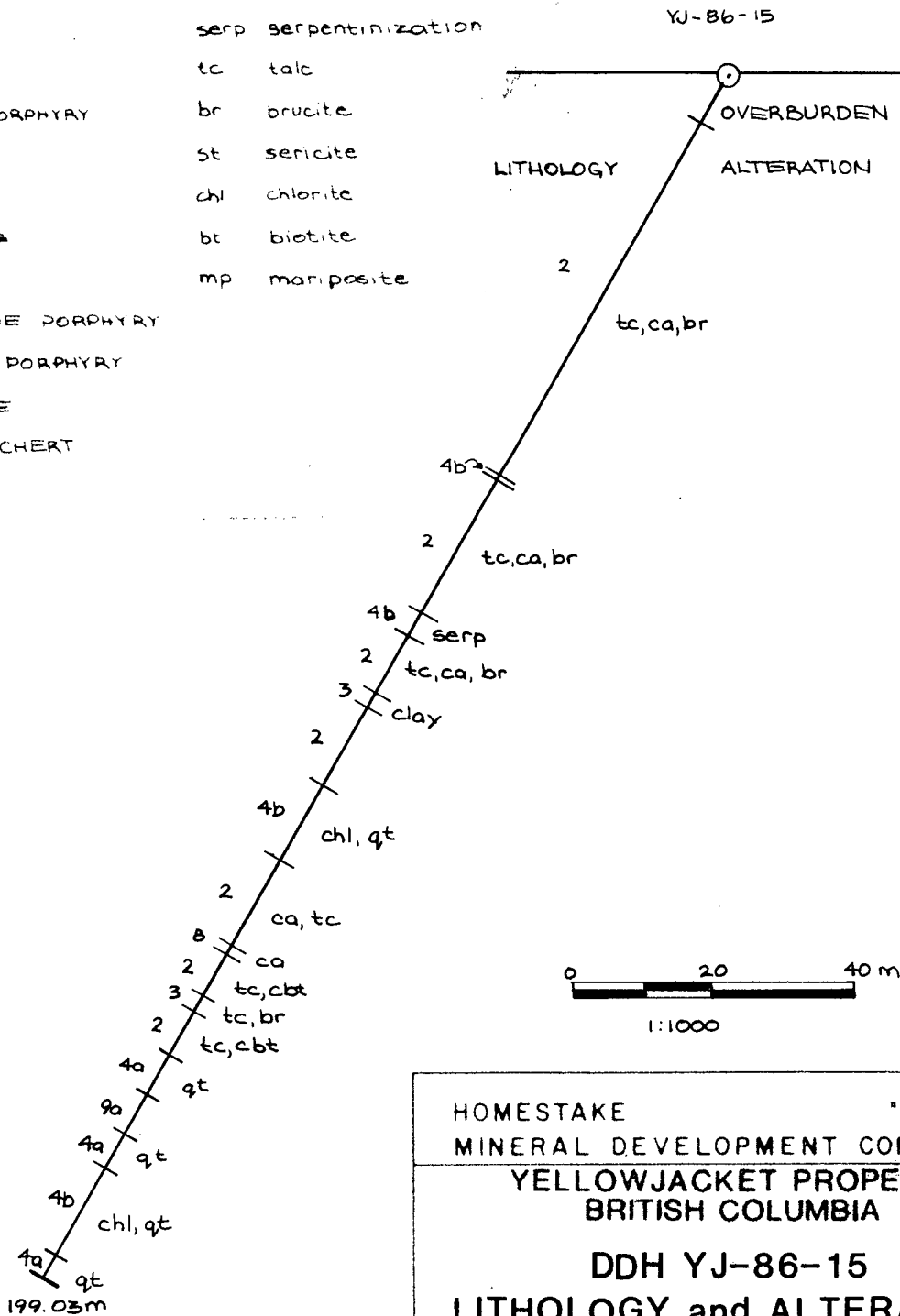
LEGEND

LITHOLOGIC TYPES

- 1 BASALT
- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 5 FELDSPAR PORPHYRY
- 6 SYENITE
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY
- 10 PYROXENITE
- 11 GRAPHITIC CHERT
- 12 ARGILLITE

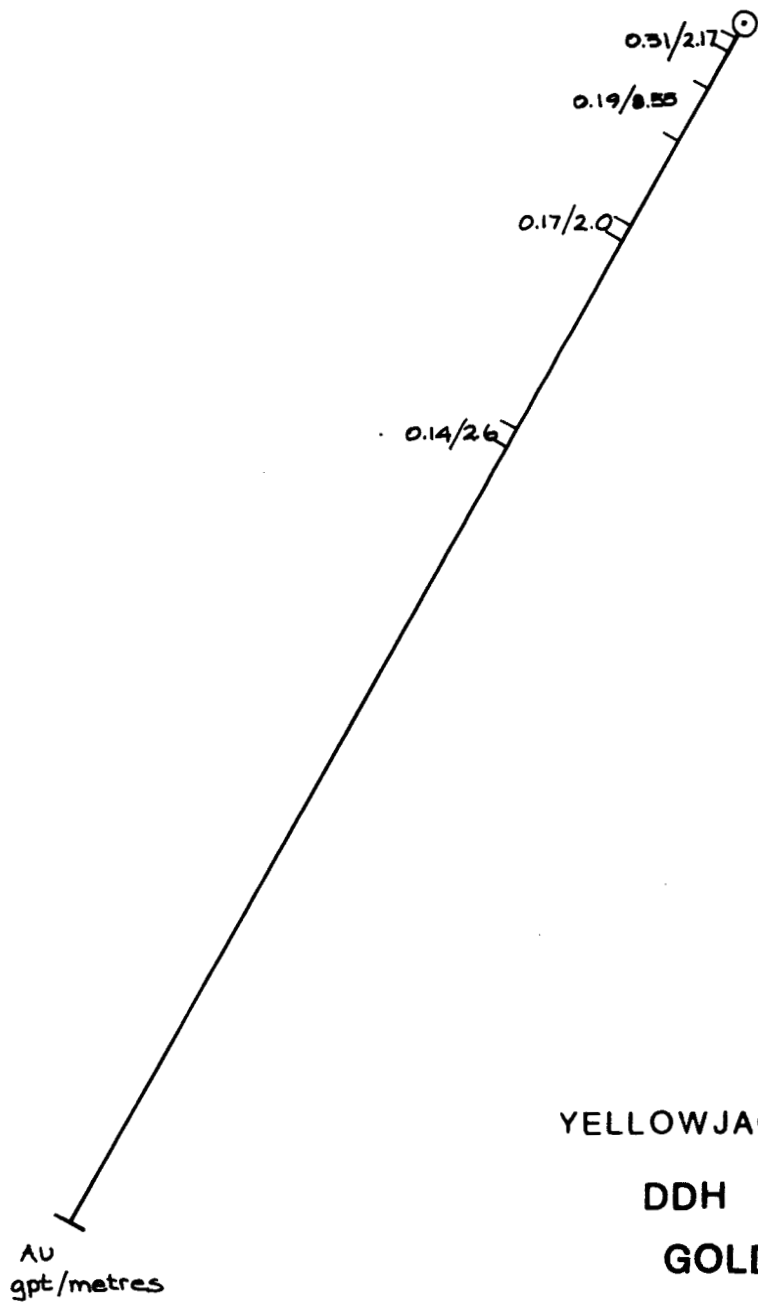
ALTERATION MINERALOGY

- ca calcite
- cbt carbonate
- sil silicification
- qt quartz veins
- serp serpentinization
- tc talc
- br brucite
- st sericite
- chl chlorite
- bt biotite
- mp mariposite



COLLAR: 26+93E  
 1+10S  
 AZIMUTH: 340°  
 DIP: 360°

|                                                                                                                                   |               |                      |            |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|------------|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY<br>YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA<br>DDH YJ-86-15<br>LITHOLOGY and ALTERATION |               |                      |            |
| DRAWN<br>MA                                                                                                                       | DATE<br>11 86 | FILE CODE<br>104N/12 | FIGURE 5Jb |
| Revised _____                                                                                                                     |               |                      |            |



YELLOWJACKET PROPERTY

DDH YJ-86-16

GOLD ASSAYS

SKa

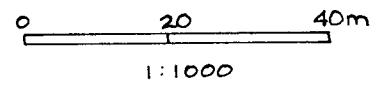
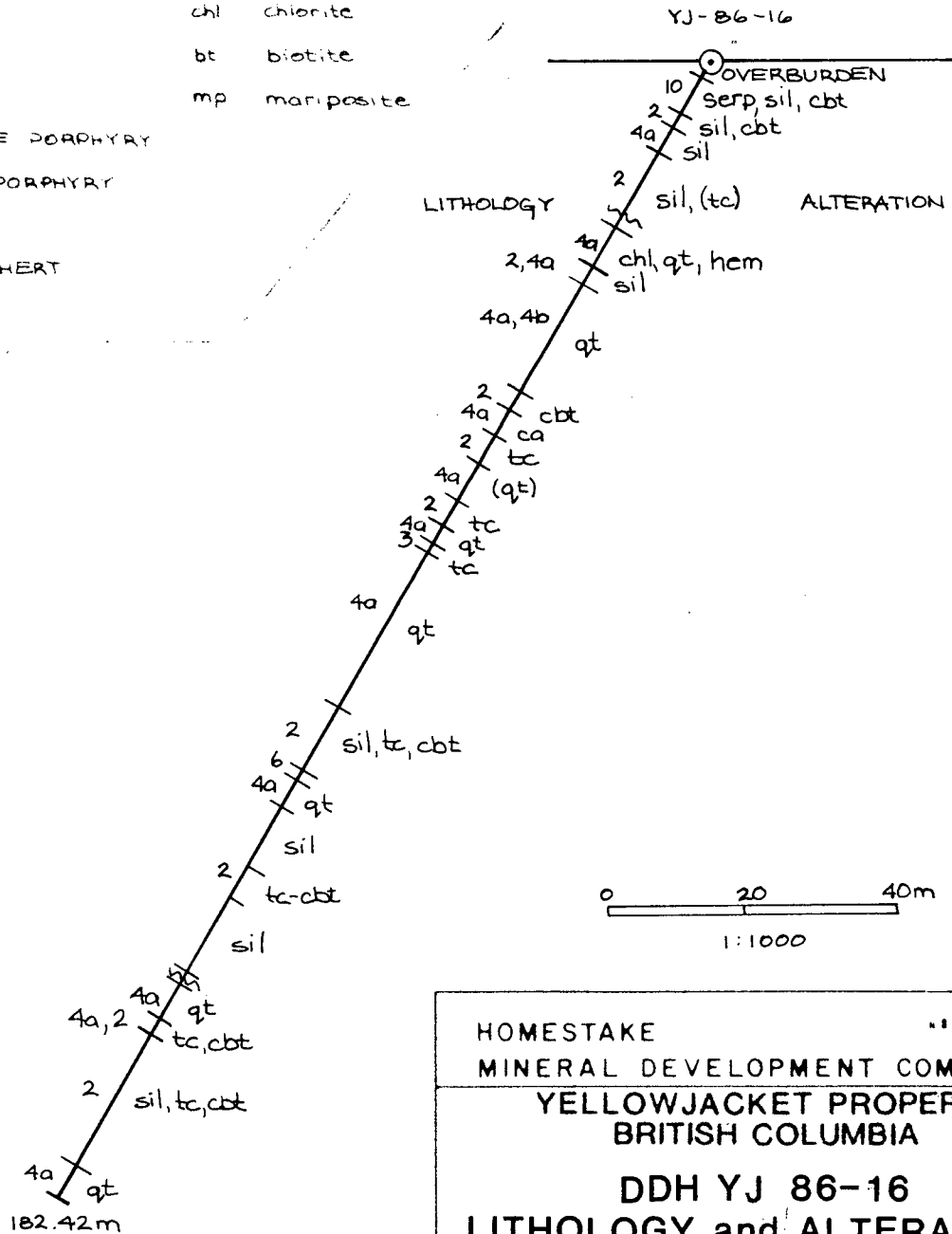
LEGEND

LITHOLOGIC TYPES

- 1 BASALT
- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 5 FELDSPAR PORPHYRY
- 6 SYENITE
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY
- 10 PYROXENITE
- 11 GRAPHITIC CHERT
- 12 ARGILLITE

ALTERATION MINERALOGY

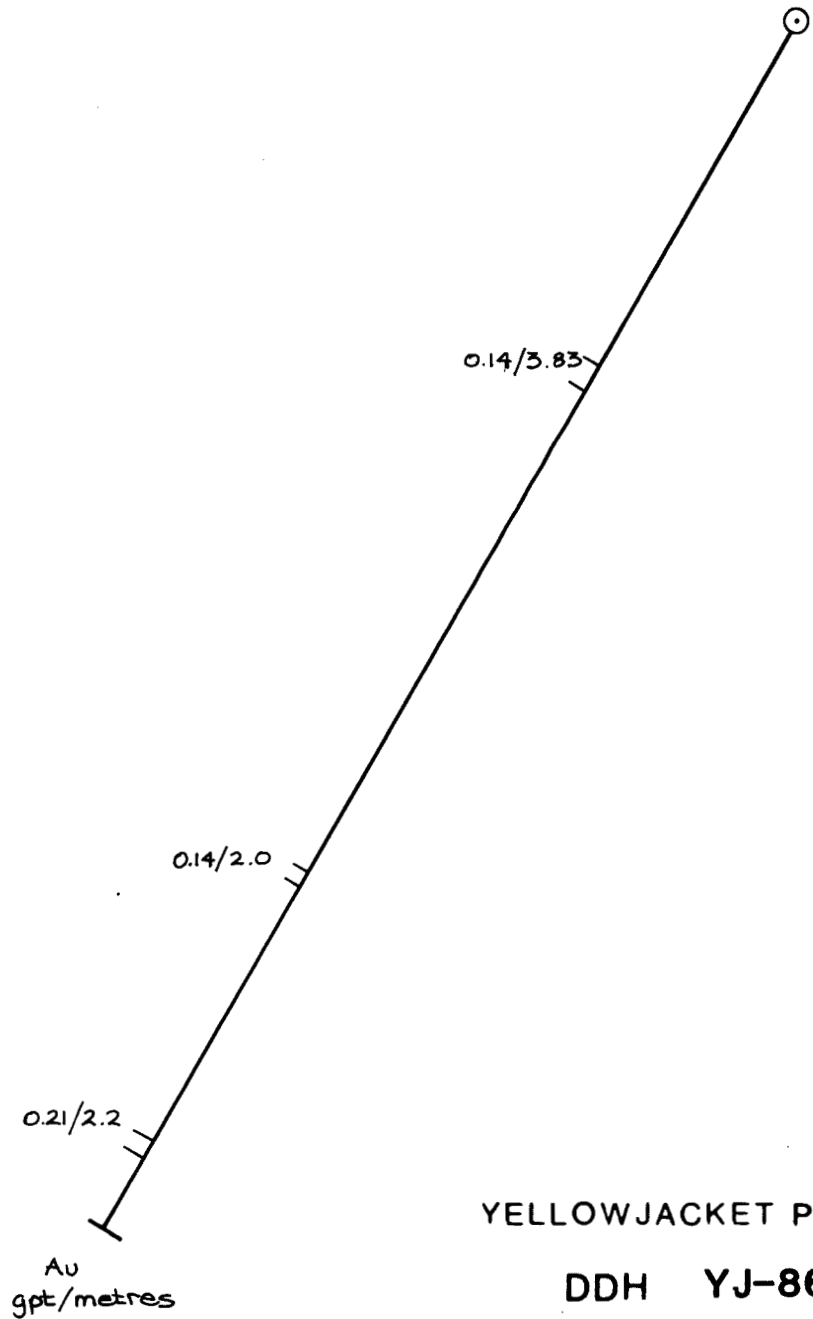
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- cbl carbonate
- sil silicification
- qt quartz veins
- serp serpentinization
- tc talc
- br brucite
- st sericite
- chl chlorite
- bt biotite
- mp mariposite



COLLAR : 34+00E  
 0+56S  
 AZIMUTH : 340°  
 DIP : -60°

|                                           |                |                      |            |
|-------------------------------------------|----------------|----------------------|------------|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY  |                |                      |            |
| YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA |                |                      |            |
| DDH YJ 86-16<br>LITHOLOGY and ALTERATION  |                |                      |            |
| DRAWN<br>MA                               | DATE<br>11 '86 | FILE CODE<br>104N/12 | FIGURE 5Kb |
| Revised _____                             |                |                      |            |





YELLOWJACKET PROPERTY  
DDH YJ-86-17  
GOLD ASSAYS  
SL

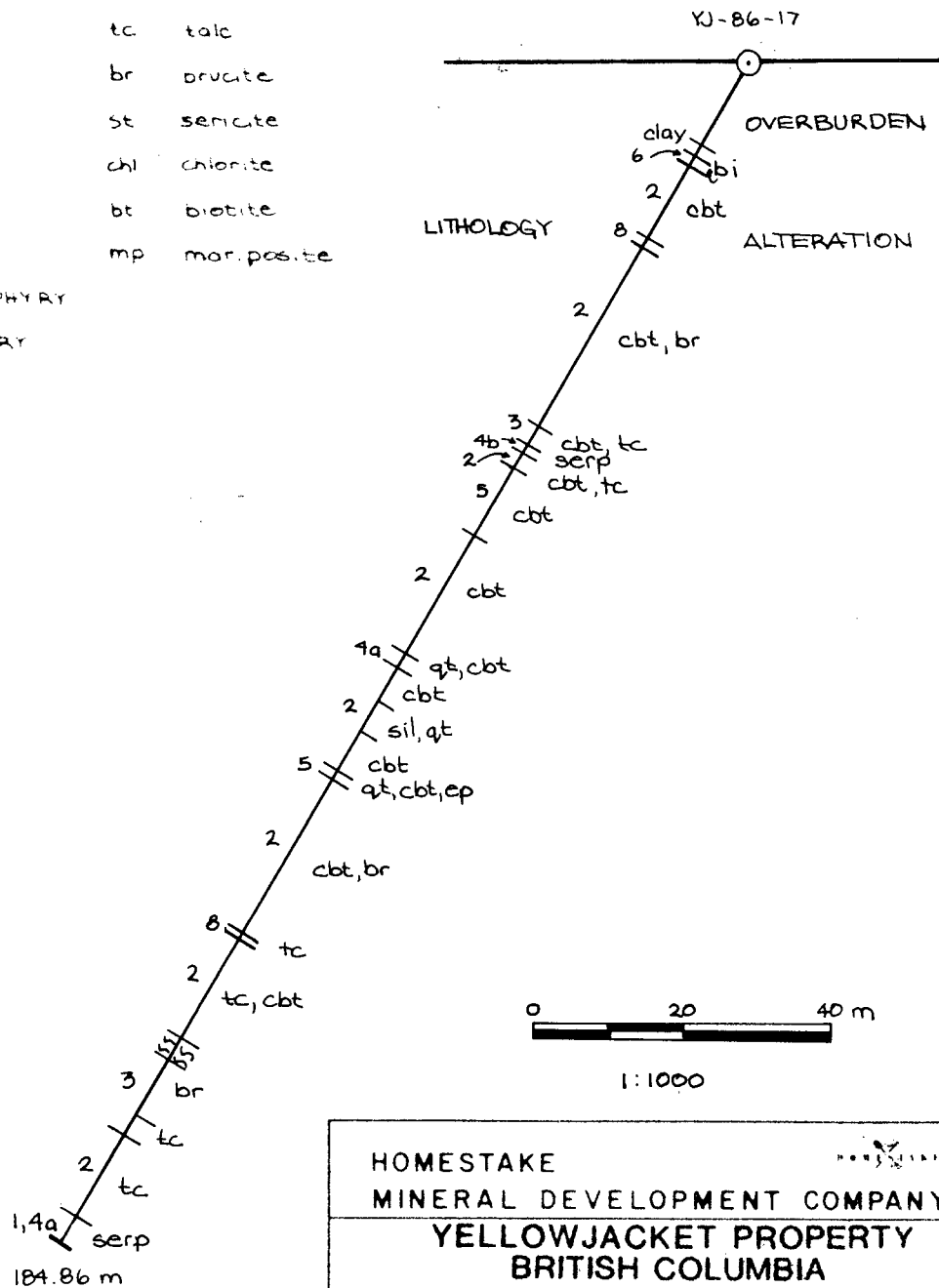
LEGEND

LITHOLOGIC TYPES

- 1 BASALT
- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 5 FELDSPAR PORPHYRY
- 6 SYENITE
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY
- 10 PYROXENITE
- 11 GRAPHITIC CHERT
- 12 ARGILLITE

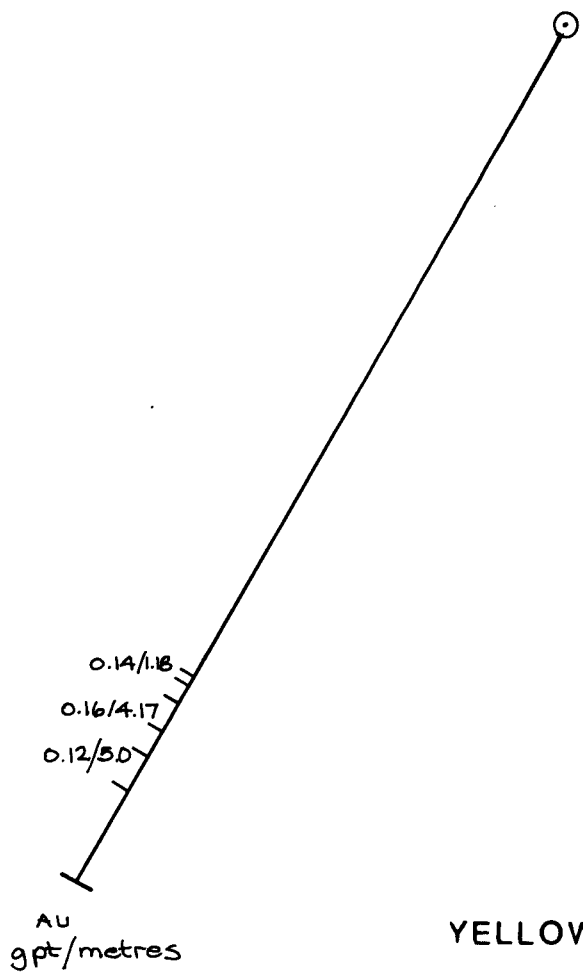
ALTERATION MINERALOGY

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- cbl carbonate
- sil silicification
- qt quartz veins
- serp serpentinization
- tc talc
- br brucite
- st sericite
- chl chlorite
- bt biotite
- mp micropelite



COLLAR : 16+50E  
 1+80S  
 AZIMUTH : 340°  
 DIP : -60°

|                             |       |           |            |
|-----------------------------|-------|-----------|------------|
| HOMESTAKE                   |       |           |            |
| MINERAL DEVELOPMENT COMPANY |       |           |            |
| YELLOWJACKET PROPERTY       |       |           |            |
| BRITISH COLUMBIA            |       |           |            |
| DDH YJ-86-17                |       |           |            |
| LITHOLOGY and ALTERATION    |       |           |            |
| DRAWN                       | DATE  | FILE CODE | FIGURE 5Lb |
| MA                          | 11/86 | 104N/12   |            |
| Revised _____               |       |           |            |



YELLOWJACKET PROPERTY

DDH YJ-86-18

GOLD ASSAYS

5Ms.

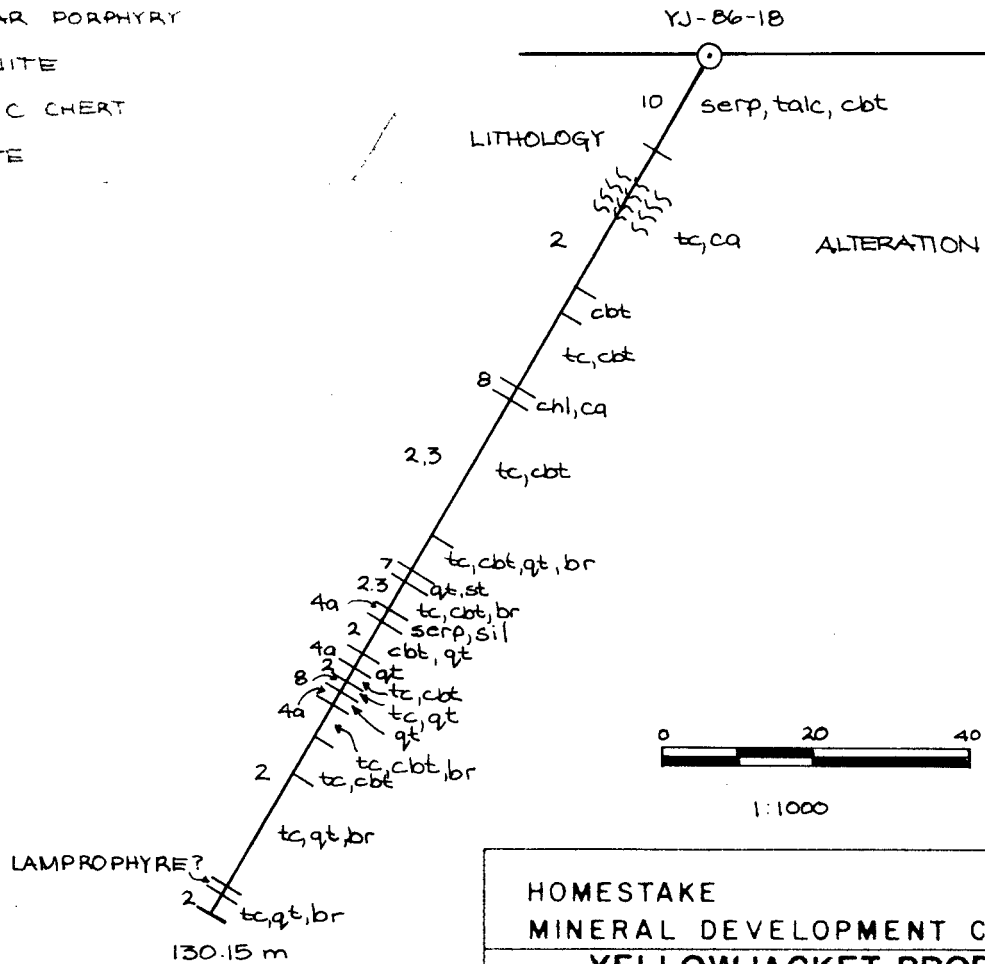
LEGEND

LITHOLOGIC TYPES

- 1 BASALT
- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 5 FELDSPAR PORPHYRY
- 6 SYENITE
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY
- 10 PYROXENITE
- 11 GRAPHITIC CHERT
- 12 ARGILLITE

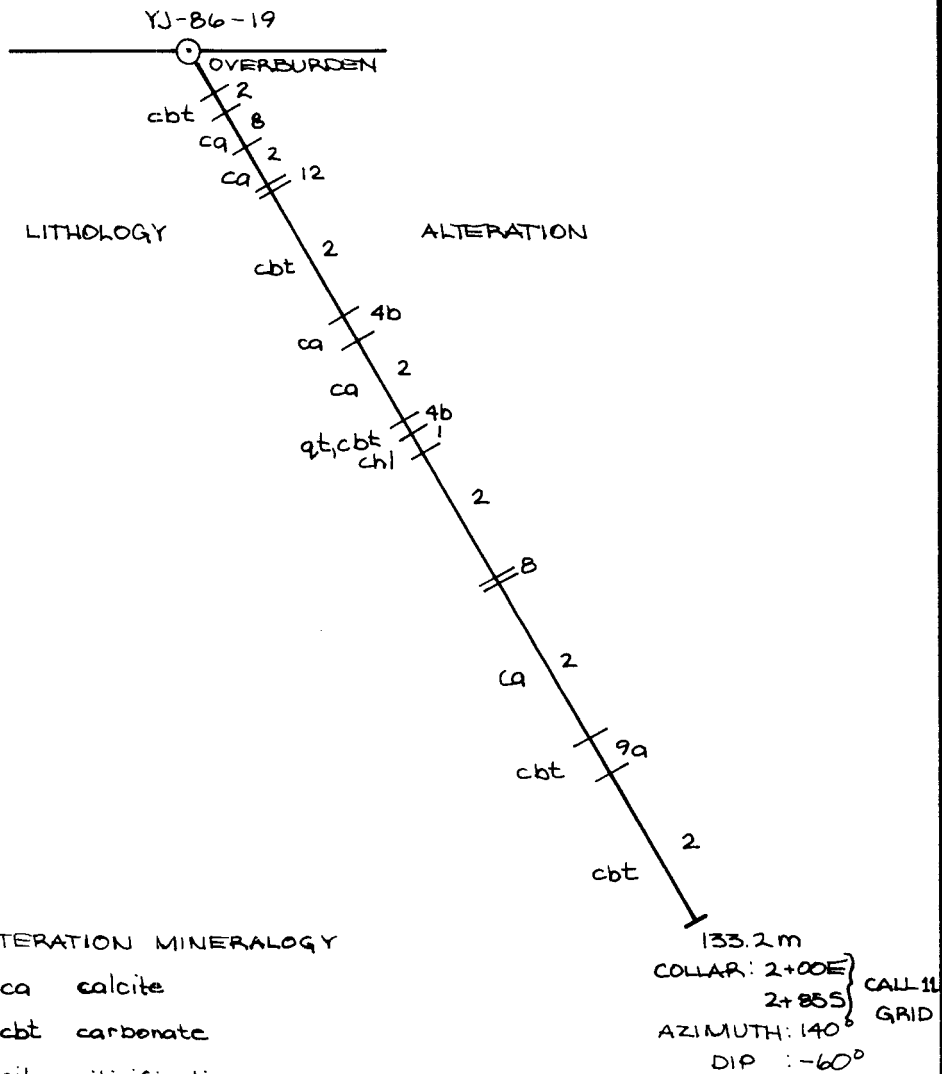
ALTERATION MINERALOGY

- ca calcite
- cbt carbonate
- sil silicification
- qt quartz veins
- serp serpentinization
- tc talc
- br brucite
- st sericite
- chl chlorite
- bt biotite
- mp monposite



COLLAR : 17+50E  
 1+80S  
 AZIMUTH : 340°  
 DIP : -60°

|                                                                                                       |               |                      |  |
|-------------------------------------------------------------------------------------------------------|---------------|----------------------|--|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY<br>YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA<br>DDH YJ-86-18 |               |                      |  |
| DRAWN<br>MA                                                                                           | DATE<br>11/86 | FILE CODE<br>104N/12 |  |
| Revised _____                                                                                         |               | FIGURE 5Mb           |  |



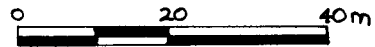
LEGEND

LITHOLOGIC TYPES

- 1 BASALT
- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 5 FELDSPAR PORPHYRY
- 6 SYENITE
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY
- 10 PYROXENITE
- 11 GRAPHITIC CHERT
- 12 ARGILLITE

ALTERATION MINERALOGY

- ca calcite
- cvt carbonate
- sil silicification
- qt quartz veins
- serp serpentinization
- tc talc
- br brucite
- st sericite
- chl chlorite
- bt biotite
- mp mariposite



1:1000

|                                                                                                                               |               |                      |                  |
|-------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|------------------|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY<br>YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA<br>YJ-86-19<br>LITHOLOGY and ALTERATION |               |                      |                  |
| DRAWN<br>MA                                                                                                                   | DATE<br>11 86 | FILE CODE<br>104N/12 |                  |
| Revised                                                                                                                       |               |                      | <b>FIGURE 5N</b> |

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APPENDIX 1

LOGISTICS REPORT ON COMBINED HELICOPTER-BORNE

MAGNETIC AND VLF-EM

SURVEY

ATLIN AREA,

BRITISH COLUMBIA

LOGISTICS REPORT ON  
COMBINED HELICOPTER-BORNE  
MAGNETIC AND VLF-EM  
SURVEY  
ATLIN AREA,  
BRITISH COLUMBIA

for  
HOMESTAKE MINERAL DEVELOPMENT COMPANY  
by  
AERODAT LIMITED  
November, 1986



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LIST OF MAPS

(Scale: 1:10,000)

Maps

1. Total Field Magnetic Contours
2. VLF-EM Total Field and Quadrature Profiles.
3. Vertical Magnetic Gradient Contours
4. VLF-EM Total Field Contours.

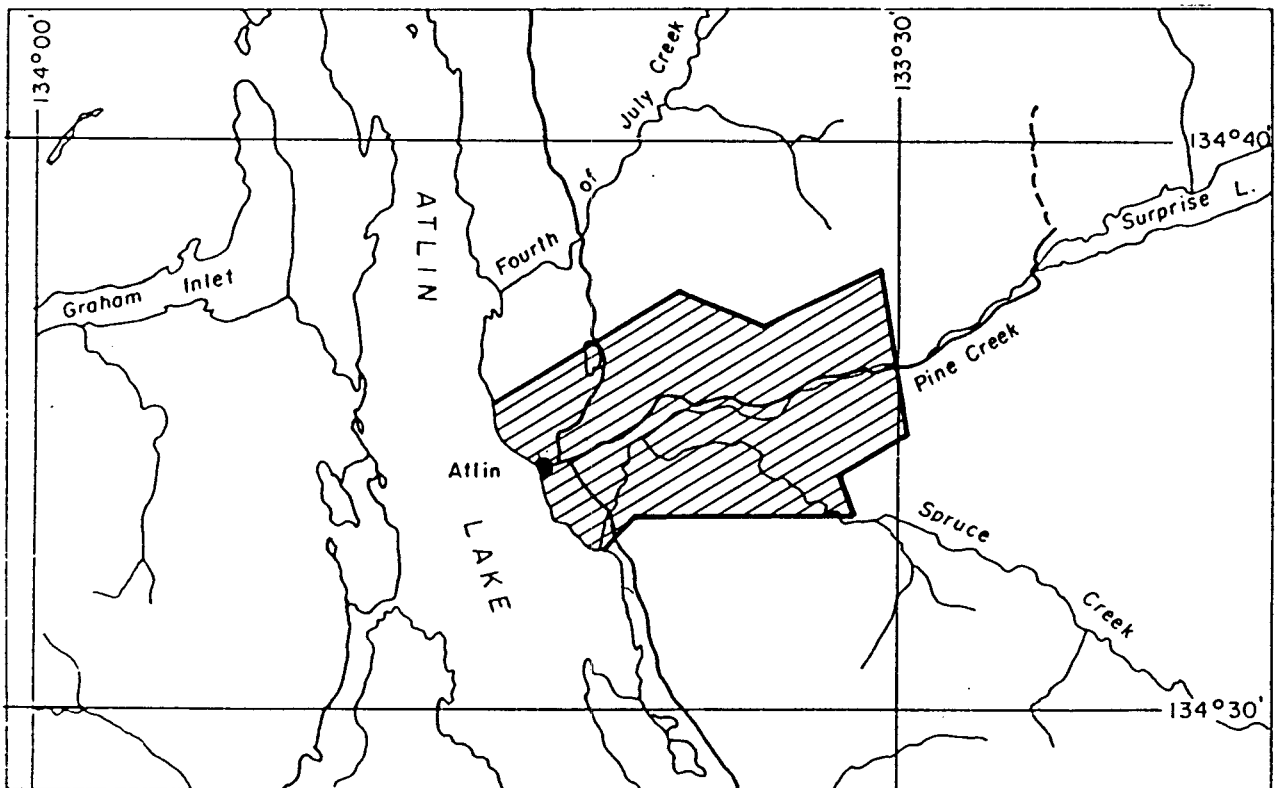
1. INTRODUCTION

This report describes an airborne geophysical survey carried out on behalf of Homestake Mineral Development Company by Aerodat Limited. Equipment operated included a high-sense Cesium magnetometer, a VLF-EM system, a tracking camera, and a radar altimeter.

The survey area's western boundary was located along a part of the eastern shore of Atlin Lake where the town of Atlin is situated, at the northwestern corner of British Columbia. The survey was flown from August 14 to 17, 1986. At a nominal line spacing of 125 metres, 108 transverse lines and two tie lines spanning 657 line kilometres were flown to provide thorough coverage of the area. The quality of the recorded geophysical data was considered to be well within the specifications described in the contract.

2. SURVEY AREA LOCATION

The survey area is depicted on the index map shown below. The flight line direction was almost north-south at an angle of 343 degrees from the azimuth.



3. AIRCRAFT AND EQUIPMENT

3.1 Aircraft

The helicopter used for the survey was an Aerospatiale A-Star 350B. Installation of the geophysical and ancillary equipment was carried out by Aerodat. The survey aircraft was flown at a mean terrain clearance of 75 metres.

3.2 Equipment

3.2.1 VLF-EM System

The VLF-EM system was a Herz Totem 2A. This instrument measured the total field and quadrature components from two transmitting stations, providing two channels of both line and orthogonal information.

The sensor was towed in a bird 10 metres below the helicopter, 65 metres above the terrain. The transmitting station used for the line channels was NPM (Lualualei, Hawaii, 23.4 kHz). For the orthogonal direction, the primary station used was NLK (Seattle, Washington, 24.8 kHz) with NAA (Cutler, Maine, 24.0 kHz) received on Flights 1, 5, and 6.

3.2.2 Magnetometer

The magnetometer was a Scintrex Cesium optically pumped high sensitivity type. The sensitivity of the instrument was 0.2 gammas at a 0.2 second sampling rate. The sensor was towed in a bird 12 metres below the helicopter.

3.2.3 Magnetic Base Station

A Geometrics 803 proton precession magnetometer was operated at the base of operations to record diurnal variations of the earth's magnetic field.

The clock of the base station was synchronized with that of the airborne system to facilitate later correlation.

3.2.4 Radar Altimeter

A Hoffman HRA-100 radar altimeter was used to record terrain clearance. The output from the instrument was a linear function of altitude for maximum accuracy.

### 3.2.5 Tracking Camera

A Geocam tracking camera was used to record flight path on 35mm film. The camera was operated in frame mode and the fiducial numbers for cross-reference to the analog and digital data were imprinted on the margin of the film.

### 3.2.6 Analog Recorder

An RMS dot-matrix recorder was used to display the data during the survey. In addition to manual and time fiducials, the following data was recorded:

| Channel | Input                      | Scale        |
|---------|----------------------------|--------------|
| ALT     | Radar Altimeter            | 10 ft./mm    |
| MAGF    | Magnetometer-Fine          | 2.5 gamma/mm |
| VOQ     | VLF-EM Quadrature - Ortho  | 2.5%/mm      |
| VOT     | VLF-EM Total Field - Ortho | 2.5%/mm      |
| VLQ     | VLF-EM Quadrature - Line   | 2.5%/mm      |
| VLT     | VLF-EM Total Field - Line  | 2.5%/mm      |
| MAGC    | Magnetometer-Coarse        | 125 gamma/mm |

3.2.7 Digital Recorder

A Data IIC data system recorded the survey on magnetic tape. Information recorded was as follows:

| <u>Equipment</u> | <u>Interval</u> |
|------------------|-----------------|
| VLF-EM           | 0.4 seconds     |
| Magnetometer     | 0.2 seconds     |
| Altimeter        | 0.4 seconds     |



#### 4. DATA PRESENTATION

##### 4.1 Base Map and Flight Path

A photomosaic base at a scale of 1:10,000 was prepared by enlargement of aerial photographs of the survey area. This base was used for both the navigation and flight path recovery in conjunction with the 35 mm tracking film.

##### 4.2 Total Field Magnetic Contours

The aeromagnetic data was corrected for diurnal variations by subtraction of the digitally recorded base station magnetic profile. No correction for regional variation was applied.

The corrected profile data were interpolated onto a regular grid at a 20m true scale interval using a cubic spline technique. The grid provided the basis for threading the presented contours at a 2 gamma interval.

The aeromagnetic data have been presented with flight path on a greyflex copy of the photo base map.

##### 4.3 Vertical Magnetic Gradient Contours

The vertical gradient was computed from the total field magnetic data to obtain values in nanoteslas/metre. These

calculated gradient profile data were then interpolated onto a regular grid at a 20m true scale interval, again using a cubic spline technique.

The gridded data were, in turn, contoured at an interval of 1 nanotesla per metre and presented with flight path on a greyflex copy of the photo base map.

#### 4.4 VLF-EM Total Field Contours

The line VLF-EM total field signals from NPM (Lualualei, Hawaii) were also gridded at a 20 metre interval and presented on a greyflex copy of the photo base map along with the flight lines.

#### 4.5 VLF-EM Total Field and Quadrature Profiles

The VLF-EM total field signal as well as the vertical quadrature component of the VLF-EM signal was compiled in profile form. The mean response level of the signal was again removed for this presentation. Also, the quadrature component was normalized to the north flight heading.

The VLF-EM profiles have been presented with flight path on the photomosaic base at a scale of 1 % per millimetre.

5. GENERAL INTERPRETIVE CONSIDERATIONS

Total Field Magnetism

The total field magnetic maps show contours of the total field using a high sensitivity magnetometer. Furthermore, a very fine contour interval of 2 nanoteslas was used.

The magnetic map is characterized by numerous magnetic features and should be carefully correlated with existing geologic maps of the area. Such correlations should prove extremely useful for updating the known geology of the area.

Measured Vertical Gradient

The vertical gradient map has the inherent advantage of defining contacts between different lithologic units as well as enhancing shorter spatial wavelength features due to near surface bodies of finite dimensions. Hence, the vertical gradient map is a useful supplement to the total field map.

VLF Electromagnetics

The VLF-EM method employs the radiation from powerful military radio transmitters as the primary signals. The magnetic field associated with the primary field is elliptically polarized in the vicinity of electrical conductors. The Herz Totem uses

three coils in the X, Y, Z configuration to measure the total field and vertical quadrature component of the polarization ellipse.

The relatively high frequency of VLF (15-25) kHz provides high response factors for bodies of low conductance. Relatively "disconnected" sulphide ores have been found to produce measureable VLF signals. For the same reason, poor conductors such as sheared contacts, breccia zones, narrow faults, alteration zones and porous flow tops normally produce VLF anomalies. The method can therefore be used effectively for geological mapping. The only relative disadvantage of the method lies in its sensitivity to conductive overburden. In conductive ground the depth of exploration is severely limited.

The effect of strike direction is important in the sense of the relation of the conductor axis relative to the energizing electromagnetic field. A conductor aligned along a radius drawn from a transmitting station will be in a maximum coupled orientation and thereby produce a stronger response than a similar conductor at a different strike angle. Theoretically, it would be possible for a conductor, oriented tangentially to the transmitter to produce no signal. The most obvious effect of the strike angle consideration is that conductors favourably

oriented with respect to the transmitter location and also near perpendicular to the flight direction are most clearly rendered and usually dominate the map presentation.

The total field response is an indicator of the existence and position of a conductivity anomaly. The response will be a maximum over the conductor, without any special filtering, and strongly favour the upper edge of the conductor even in the case of a relatively shallow dip.

The vertical quadrature component over steeply dipping sheet-like conductor will be a cross-over type response with the cross-over closely associated with the upper edge of the conductor.

The response is a cross-over type due to the fact that it is the vertical rather than total field quadrature component that is measured. The response shape is due largely to geometrical rather than conductivity considerations and the distance between the maximum and minimum on either side of the cross-over is related to target depth. For a given target geometry, the larger this distance the greater the depth.

The amplitude of the quadrature response, as opposed to shape is function of target conductance and depth as well as the

conductivity of the overburden and host rock. As the primary field travels down to the conductor through conductive material it is both attenuated and phase shifted in a negative sense. The secondary field produced by this altered field at the target also has an associated phase shift. This phase shift is positive and is larger for relatively poor conductors. This secondary field is attenuated and phase shifted in a negative sense during return travel to the surface. The net effect of these 3 phase shifts determine the phase of the secondary field sensed at the receiver.

A relatively poor conductor in resistive ground will yield a net positive phase shift. A relatively good conductor in more conductive ground will yield a net negative phase shift. A combination is possible whereby the net phase shift is zero and the response is purely in-phase with no quadrature component.

A net positive phase shift combined with the geometrical cross-over shape will lead to a positive quadrature response on the side of approach and a negative on the side of departure. A net negative phase shift would produce the reverse. A further sign reversal occurs with a 180 degree change in instrument orientation as occurs on reciprocal line headings. During

digital processing of the quadrature data for map presentation  
this is corrected for by normalizing the sign to one of the  
flight line headings.

Respectfully submitted,  
AERODAT LIMITED



November, 1986

J8631

Richard D.C. Yee

P.Eng., Geophysicist

APPENDIX 2

PRELIMINARY REPORT  
MAGNETOMETER AND VLF SURVEY



PRELIMINARY REPORT

MAGNETOMETER AND VLF SURVEY

YELLOWJACKET PROPERTY

West Grid (Lines 0 to 22W)

ATLIN AREA, B.C.

on behalf of

HOMESTAKE MINERAL DEVELOPMENT COMPANY

640 - 1380 Burrard Street

Vancouver, B.C. V6Z 2H3

contact: Mr. Peter Ronning

(604) 684 2345

Field work completed: October 13 to 15, 18 to 20, 1986

by

Alan Scott, Geophysicist

4013 West 14th Avenue

Vancouver, B.C. V6R 2X3

(604) 228 0237

October 31, 1986

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| 3 Survey Grid and Survey Coverage | 1    |
| 4 Personnel                       | 1    |
| 5 Instrumentation                 | 2    |
| 6 Recommendations                 | 2    |

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| Total Field Magnetometer Contour Plan (1:5000 scale)           | 1 & 2  |
| Fraser Filter VLF Contour Plan (1:5000 scale)                  | 3 & 4  |
| Total Field Magnetometer Contour Plan (1:5000 scale); coloured | 5      |
| Fraser Filter VLF Contour Plan (1:5000 scale); coloured        | 6      |

## 1. INTRODUCTION

Magnetometer and VLF-EM surveys were conducted over the west portion of the Yellowjacket Property, Atlin Area, B.C. on behalf of Homestake Mineral Development Company, in the periods October 13 to 15, and 18 to 20, 1986. The work was performed by Alan Scott, Geophysicist.

Both total field and vertical gradient magnetometer readings were taken at 20 meter intervals. All values were corrected for diurnal variation using a fixed base station sampling at 6 second intervals. Only the total field results are presented in this preliminary report.

Station NPM, Lualualei, Hawaii, was used for the VLF-EM survey. Readings of horizontal field strength, in phase, and quadrature were taken at 20 meter intervals. Only the in phase Fraser filtered values are presented in this preliminary report.

## 2. SURVEY LOCATION

The Yellowjacket Property is located about 8 kilometers east of Atlin, B.C. Access is via the Surprise Lake road.

## 3. SURVEY GRID AND SURVEY COVERAGE

A total of 36.8 line kilometers were surveyed over the west portion of the Yellowjacket Property (lines 0 to 22W).

## 4. PERSONNEL

Dave Carr and Ken Moir, geophysical technicians, performed the field survey under the supervision of Alan Scott, Geophysicist.

Peter Ronning, Geologist, was on site during the course of the survey on behalf of Homestake Mineral Development Company.

## 5. INSTRUMENTATION

A Scintrex IGS2 configured to operate as a total field and vertical gradient magnetometer, and as a VLF-EM receiver was used for the survey. A Scintrex MP4 served as the base station magnetometer and cycled at 6 second intervals. Both units record all measurements in internal memory. All magnetometer measurements were corrected for diurnal variation with reference to the base station.

The survey data was archived, processed, and plotted using a Corona PPC 400 microcomputer running the Scintrex IGS applications software and proprietary software.

## 6. RECOMMENDATIONS

A preliminary examination of the total field magnetometer results (figure 5) and of the Fraser filtered VLF results (figure 6) suggests that the surveys have defined several major structures that merit further work as gold exploration targets.

The most prominent of these are:

The series of magnetic lows that trend south southeast from 2000W;100S to 1100W;1400S,

The northeast trending VLF conductor 1500W;1750S to 700W;1220S (which is coincident with a magnetic low trend),

The series of magnetic lows trending south southeast from 1400W;1600S to 700W;2020S.

The prominent broad magnetic high in the north eastern portion of the grid, which is flanked to the east by a strong decrease in magnetic background values, outlines the location of a more mafic lithologic unit.

A detailed interpretation of these results, along with the vertical gradient magnetometer and VLF profiles, and correlation to the geological and geochemical data bases is recommended to select specific targets for further work.

Respectfully Submitted,



Alan Scott,  
Geophysicist

APPENDIX 3

INDUCED POLARIZATION SURVEY

GEOPHYSICAL REPORT  
INDUCED POLARIZATION SURVEY

YELLOWJACKET PROPERTY  
ATLIN AREA, B.C.

on behalf of

HOMESTAKE MINERAL DEVELOPMENT COMPANY  
640 - 1380 Burrard Street  
Vancouver, B.C. V6Z 2H3

contact: Mr. Peter Ronning  
(604) 684 2345

Field work completed: October 10 to 12, 16, 17, 1986

by

Alan Scott, Geophysicist  
4013 West 14th Avenue  
Vancouver, B.C. V6R 2X3  
(604) 228 0237

October 31, 1986

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| Interpretation Plan (1:5000 scale)                          | 6      |
| Spectral chargeability and time constants (1:2000)          | 7      |

## 1. INTRODUCTION

Induced polarization and resistivity surveys were conducted over portions of the Yellowjacket Property, Atlin Area, B.C. on behalf of Homestake Mineral Development Company, in the period October 10 to 12, 16, 17, 1986. The work was performed by Alan Scott, Geophysicist.

The pole dipole electrode array was used on the induced polarization survey, with an "a" spacing of 20 meters and "n" separations of 1, 2, 3, 4, and 5. The current electrode was to the north of the receiving electrodes on all survey lines.

## 2. SURVEY LOCATION

The Yellowjacket Property is located about 8 kilometers east of Atlin, B.C. Access is via the Surprise Lake road.

## 3. SURVEY GRID AND SURVEY COVERAGE

A total of 6.26 line kilometers were surveyed over 7 lines on the Yellowjacket Property. For logistical reasons, the n=5 separation was dropped where the lines crossed Pine Creek.

## 4. PERSONNEL

Alan Scott, Geophysicist, was the party chief on the survey and operated the IPR-11 receiver.

Peter Ronning, Geologist, was on site during the course of the survey on behalf of Homestake Mineral Development Company.



## 5. INSTRUMENTATION

A Scintrex IPR-11 time domain microprocessor based induced polarization receiver and a Scintrex IPC-7 2.5 kw transmitter were used on the survey. The IPR-11 operates on an alternating square wave transmitted current pulse train, and samples the decay curve at ten semilogarithmically spaced times after cessation of each pulse. A 2 second on/2 second off pulse was used on the survey. The data is continually averaged until the operator is satisfied convergence has occurred, and is filed into solid state memory. The eighth slice (from 690 to 1050 milliseconds after shutoff: midpoint at 870 milliseconds) is the value that has been plotted on the plans and pseudosections.

The survey data was archived, processed, and plotted using a Corona PPC 400 microcomputer running the Scintrex Soft II and proprietary software. All chargeability responses were subjected to spectral analysis using the Scintrex SPCTRM curve fitting procedure (Johnson, Geophysics, Vol. 49, No. 11 p.1993-2003).





## 6. DISCUSSION OF RESULTS

The survey results for all five separations are presented in standard pseudosection form (1:2000 scale) on figure 1. The chargeability and resistivity values for the 1st and 2nd second separations are also presented in contour plan form (1:5000 scale) as figures 2 and 3 (chargeability) and figures 4 and 5 (resistivity).

The Spectral chargeability ( $M_0$ ) and time constants are presented in pseudosection form as figure 7. The values have not been plotted where the fit to the theoretical curve had an rms error of greater than 5%.

The interpretation of the results is summarized on figure 6.

Chargeability anomalies have been categorized on the pseudosections and the interpretation plan as follows:

-  strong chargeability high
-  moderate chargeability high
-  weak chargeability high
-  weak, poorly defined chargeability high

Resistivity highs have been indicated on the pseudosections and the interpretation plan as follows:

{ ← H → }

A major change in lithology is interpreted to occur at the wavy line noted on the pseudosections and interpretation plan (figures 1 and 6). Background resistivity and chargeability is generally moderate to high to the south of this line, and is generally low to moderate to the north of this line.

Seven chargeability anomalies have been identified on the interpretation plan by the numbers 1 to 7.

Anomalies 4, 5, and 7 are all broad, moderate to strong chargeability highs. They are characterized by long time constants, and are coincident with moderate to high resistivity. A flat lying source (graphitic sediments?) is suggested by the shape of these chargeability anomalies (in particular; line 1400E, stations 340 to 440S and line 1800E, stations 860 to 960S). Anomalies 4, 5, and 7 all lie to the south of the inferred break in lithology.

Anomaly 6 similarly lies to the south of the inferred break in lithology and is coincident with high resistivity, but it is of lower amplitude and is characterized by short time constants.

Anomalies 1 and 2 lie to the north of the inferred break. They are weak to moderate chargeability highs characterized by short time constants, and are coincident with moderately high resistivity.

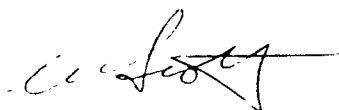
Anomaly 3 lies immediately north of the inferred break. The weak response on line 1200E is characterized by short time constants and the moderate response on line 1300E is characterized by long time constants. Anomaly 1 is coincident with locally low resistivity.

## 6. RECOMMENDATIONS

Chargeability highs 4, 5, and 7 appear to represent a flat lying source(s) that is probably not of direct interest to a gold exploration program.

Anomalies 1, 2, 3, and possibly 6, are of more limited extent and may represent local increases in sulphide content. Subject to a detailed correlation of these results to the geological and geochemical data bases, further investigation of these anomalies to determine if they carry gold values is recommended.

Respectfully Submitted,



Alan Scott,  
Geophysicist

APPENDIX 4

METALLURGICAL TESTING

~~10-10~~  
Yellowknife

JOHN W. FISHER, P. ENG.

18 September 1986

RECEIVED  
SEP 22 1986

Homestake Mineral Development Company  
Suite 640 - 1380 Burrard Street  
Vancouver, B.C.  
V6Z 2H3

H.M.D.C.

Attention: Mr. Peter Ronning  
Senior Exploration Geologist

Dear Mr. Ronning:

Lakefield Research have completed the tests done on a composite prepared from the five samples taken from the DDH YJ 86-6. Their report is enclosed with this letter.

These initial results indicate the gold to be free-milling and easily recoverable by means of gravity concentration and flotation processes (overall recovery = 95%).

The samples sent to Lakefield were considerably coarser than 10 mesh (approx. 60 to 70% being plus 10 mesh). After preparing them to minus 10 mesh, the head samples cut for assay showed considerable variability and this is due to the presence of coarse free gold. However, the overall calculated head assay - from metallurgical testwork - compares well with the average of three separate assay head results.

|      |                      |   |                 |
|------|----------------------|---|-----------------|
| i.e. | Calc head from tests | = | 5.98 g Au/tonne |
|      | Average assay head   | = | 6.08 g Au/tonne |

For routine assaying of drill core rejects, it certainly is advisable to screen out and assay separately the metallics which are retained, after pulverizing, on 100 or 150 mesh screens.

At this stage, further testwork is not warranted. Your material is characterized by variable amounts of coarse free gold and recovery can be achieved by simple methods. As the drilling proceeds, it may be advisable to check samples for sulphide content if visual indications suggest this may be variable.

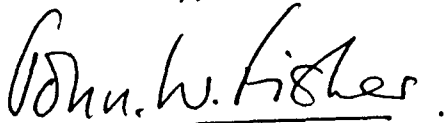
The flotation of gravity tails produced a low grade product and further work - at a later stage - will be necessary to determine the most economic means for recovery of gold in this portion of the material. However, that should wait until your exploration work is further advanced and until there is a reliable estimate of tonnage and grade existing at the property.

The Lakefield report includes a summary of the results and I have taken the liberty to make a simpler presentation of their pertinent data. It is shown on the attached sheet.

Homestake Mineral Development  
Attention: Mr. Peter Ronning  
September 18, 1986  
Page 2

I trust you will find this satisfactory. If you need any further information, I will be pleased to discuss these data with you at your convenience.

Yours sincerely,

A handwritten signature in cursive script that reads "John W. Fisher". The signature is written in dark ink and is positioned above the typed name.

John W. Fisher, P.Eng.

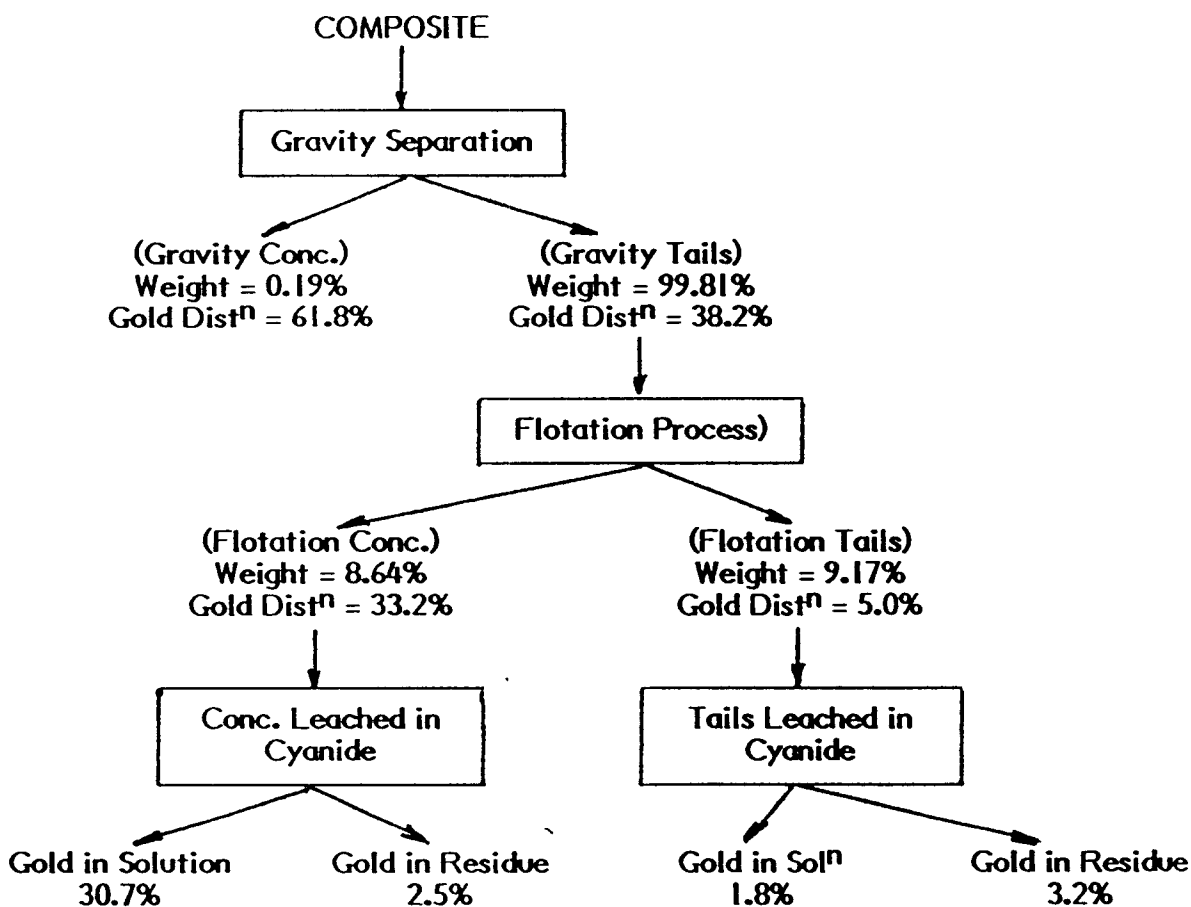
JWF/ke  
Att.

HOMESTAKE MINERAL DEVELOPMENT COMPANY

Metallurgical Test at Lakefield Research (August 1986)  
on a Composite Sample (DDH YJ 86-6: 82.3 m. to 89.9 m.)

Crushed rejects from each of the five samples were screened at 10 mesh. In all instances, these were found to be approximately 60 to 70% plus 10 mesh with larger particles at 1/4 inch. All materials were crushed to obtain 100% minus 10 mesh.

After crushing, each sample was riffled to obtain a half portion and these were combined to produce a composite for testwork. The processes used and results obtained are outlined below.



OVERALL SUMMARY

| Process                  | % Dist <sup>n</sup><br>Au | % Overall<br>Recovery<br>Au |
|--------------------------|---------------------------|-----------------------------|
| Gravity Concentration    | 61.8                      | 95.0                        |
| Flotation of Grav. Tails | 33.2                      |                             |

*Handwritten signature*

APPENDIX 5

DIAMOND DRILL HOLE LOGS

DIAMOND DRILL HOLE

YJ 86-6
















| DRILL INTERVAL | FROM   | TO    | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE                 | ROD  | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                             | ALTERATION and VEINING                        | MINERAL PERCENTAGES |     |    |       | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |      |  |              | LAB |
|----------------|--------|-------|-----------------------|---------------|-----------------------|---------------------------|------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------|-----|----|-------|-------|---------------|--------------------|------|--|--------------|-----|
|                |        |       |                       |               |                       |                           |      |         |                                                                                                                                                                                                                                     |                                               | Al                  | Si  | Ti | Fe    |       |               | As                 | opt. |  |              |     |
| 135            |        |       | 8                     | 100           | casualy sheared 20-50 | qtz and healed shear      | good |         | CHERTIFIED CARBONATE Rk: creamy gray with dk qtz patches, intact sheared sections of banded qtz-carb + dk gray carb                                                                                                                 | panasive dolo.                                | 10                  | 0   | 11 |       | 130   | 6-18          |                    |      |  |              |     |
| 140            | 142.95 | 140   |                       |               |                       |                           |      |         | 135-141: 15% clear qtz + carb + 1% fine pt<br>@ 140: 5mm qtz carb. in qtz                                                                                                                                                           |                                               | 10                  | 0   | 11 |       | 140   | 6-19          |                    |      |  |              |     |
| 145            |        |       | 11.3                  | 100           | head of shear ?       | massive carb + qtz healed | good |         | massive carb/Qtz Rk: white to creamy gray, dolo(cc) healed, mottled and patchy gray carb, irregularly vned by white carb. and X-cut by 10-20% fine to 3mm clear qtz vns, 1% fine pt, 5% mottled medium gray patches to 3mm (all?cc) | panasive dolo + cc with irregular quartz vns. | 20                  | 10  | 11 |       | 140   | 6-20          |                    |      |  |              |     |
| 150            | 146.42 | 157.3 |                       |               |                       |                           |      |         | Lower contact gradational                                                                                                                                                                                                           |                                               | 20                  | 10  | 11 |       | 152.3 | 6-21          |                    |      |  |              |     |
| 155            |        |       |                       |               |                       |                           |      |         | BASALT massive, medium gray, f.g., uniform, minor chlorite, 3% hairline irregular qtz vning                                                                                                                                         | qtz vning                                     | 3                   |     | 2  |       | 157.3 | 6-22          |                    |      |  |              |     |
| 160            |        |       |                       |               |                       |                           |      |         | @ 157: 5mm qtz vns @ 30°                                                                                                                                                                                                            | minor chlorite                                |                     |     |    |       | 165.3 | 6-23          |                    |      |  |              |     |
| 165            |        |       | 35.7                  | 100           | casualy broken        |                           | good |         | from 165-171.5: bleached and carb. altered with 5% qtz vning                                                                                                                                                                        | panasive qtz-carb.                            | 5                   | 5   |    |       | 165.0 | 6-24          |                    |      |  | SAMPLE 6-165 |     |
| 170            |        |       |                       |               |                       |                           |      |         | @ 166: 7cm banded qtz-carb @ 70°                                                                                                                                                                                                    |                                               |                     |     |    |       | 170.0 | 6-25          |                    |      |  |              |     |
| 175            |        |       |                       |               |                       |                           |      |         | @ 170: 10cm silica healed shear @ 60° with white qtz units cut by clear qtz                                                                                                                                                         | qtz vning                                     | 1-2                 | 3   |    |       | 171.5 | 6-26          |                    |      |  |              |     |
| 180            |        |       |                       |               |                       |                           |      |         | from 170-171.5: bleached basalt in situ and shattered with 2 generations of narrow, irregular qtz vning.                                                                                                                            | chlorite seams                                |                     |     |    |       | 176.5 | 6-27          |                    |      |  |              |     |
| 185            |        |       |                       |               |                       |                           |      |         | from 171.5-188: dk qtz, moderately chloritic fine leucocrone 3% irregular qtz-carb vning, irregular chlorite rich seams to 3mm.                                                                                                     |                                               |                     |     |    | 181.5 | 6-28  |               |                    |      |  |              |     |
| 190            | 187.50 | 1880  | 2.6                   |               |                       |                           | good |         | @ 188: 10cm banded qtz-carb @ 75°<br>Lower contact by carb. bleached chlorite seams                                                                                                                                                 | panasive rare qtz vns.                        |                     | 100 | Tr |       | 188.0 | 6-29          |                    |      |  |              |     |
| 195            | 188.07 | 1906  | 4.5                   | 100           |                       |                           | good |         | MASSIVE MAGNESITE TALC: massive, 20% dk gray patches rare qtz vns. Lower contact 30°                                                                                                                                                |                                               | 3                   | 2   | Tr |       | 190.6 | 6-30          |                    |      |  |              |     |
| 200            | 189.47 | 1951  |                       |               |                       |                           | good |         | BASALT: massive, dk qtz, 5% irregular qtz carb veins to 2mm                                                                                                                                                                         |                                               | 5                   | 1   | 20 | Tr    |       | 195.1         | 6-31               |      |  |              |     |
| 205            |        |       | 16.1                  | 100           |                       |                           | good |         | ALTERED SERP: massive, soft, med. to light qtz, dolomite, talcous, rare qtz vns to 3mm.                                                                                                                                             | panasive talc: rare qtz vns.                  |                     |     |    |       | 200.1 | 6-32          |                    |      |  |              |     |
| 210            |        |       |                       |               |                       |                           |      |         | @ 197: 1cm talc gouge @ 90°<br>@ 198: narrow shear @ 30°<br>Lower contact sharp @ 75°                                                                                                                                               |                                               |                     |     |    |       | 205.1 | 6-33          |                    |      |  |              |     |
|                |        |       |                       |               |                       |                           |      |         |                                                                                                                                                                                                                                     |                                               |                     |     |    |       | 211.2 | 6-34          |                    |      |  |              |     |

| DRILL INTERVAL | FROM | TO   | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE          | ROD   | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ALTERATION and VEINING                 | MINERAL PERCENTAGES |     |            |     |      | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |      | LAB  |  |
|----------------|------|------|-----------------------|---------------|-----------------------|--------------------|-------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------|-----|------------|-----|------|-------|---------------|--------------------|------|------|--|
|                |      |      |                       |               |                       |                    |       |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                        | CC (vol)            | qtz | Apic (hal) | Pl. | Asph |       |               | Gr.                |      |      |  |
| 210            | 6477 | 2112 | 1.8                   | 100           |                       | massive            | good  | V V     | BASALT: massive, as before, 5% fine qtz vining<br>Lower contact sharp + disc. Py.                                                                                                                                                                                                                                                                                                                                                                                              | qtz vining                             |                     |     |            |     | 2112 |       |               |                    |      |      |  |
| 215            | 6478 | 2130 | 83                    | 150           |                       | massive            | good  | S S     | ALTERED SERP. medium to light fine gr. mottled dk serp patches, cut by several generations of qtz vns: white qtz 1-3mm. @ high angle & clear qtz with carbony haloes to 2mm, irregular. @ 213: 6cm wuggy qtz vn.                                                                                                                                                                                                                                                               |                                        | 3                   | 3   |            | 12  | 2130 | 6-35  |               |                    |      |      |  |
| 220            | 6479 | 2213 |                       |               |                       |                    |       | V V     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                        |                     |     |            |     | 2213 | 6-37  |               |                    |      |      |  |
| 225            |      | 2285 | 72                    | 100           |                       | massive            | good  | V V     | BASALT: dk grn with patchy bleached<br>interbeds<br>20% qtz (chalcedony) vining loc parallel to ch<br>+ earlier 5% mottled silicification<br>Lower contact sheared @ 60°                                                                                                                                                                                                                                                                                                       | qtz vining<br>patchy<br>silicification | 1-2                 | 25  |            | tr  | 2285 | 6-38  |               |                    |      |      |  |
| 230            | 6480 | 2314 | 2.9                   | 100           |                       | poor               | poor  | S S     | FAULT: 40% white qtz vn + broken qtz<br>in talc carb gouge                                                                                                                                                                                                                                                                                                                                                                                                                     | talc carb                              | 20                  | 40  | 40         | tr. | 2314 | 6-39  |               | SAMPLE<br>6-227    |      |      |  |
| 235            |      |      |                       |               |                       | massive            | good  | S S     | ALTERED SERP: creamy gray with<br>local dk gray patches, local weak<br>shearing 40-60°, 10% total qtz vining<br>to 5mm wide.                                                                                                                                                                                                                                                                                                                                                   | talc<br>carb                           | 10                  | 10  | 20         | tr  | 2364 | 6-40  |               |                    |      |      |  |
| 240            |      |      | 29.1                  |               |                       |                    |       | S S     | @ 236: 3cm qtz vn @ 70°                                                                                                                                                                                                                                                                                                                                                                                                                                                        | with<br>qtz vining                     |                     |     |            |     | 2404 | 6-41  |               |                    |      |      |  |
| 245            |      |      |                       |               |                       |                    |       | S S     | @ 240: 4cm qtz vn @ 10°                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                        |                     |     |            |     | 2464 | 6-42  |               |                    |      |      |  |
| 250            |      |      |                       |               |                       |                    |       | S S     | @ 241.8: 3cm qtz vn @ 80°                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                        |                     |     |            |     | 2514 | 6-43  |               |                    |      |      |  |
| 255            |      |      |                       |               | sheared<br>20-60°     | sheared            | fair  | S S     | @ 252.0: 8cm wuggy qtz vn @ 80°<br>@ 253.3: 4cm white qtz vn @ 80°<br>from 253.5 to 259: moderately shear<br>with 10% broken white qtz 20-60°<br>From 259 to 260.5: silicified, creamy<br>gray grn with 20% qtz stuck to 3mm<br>Lower contact broken                                                                                                                                                                                                                           |                                        |                     |     |            |     | 2564 | 6-44  | .093          |                    |      |      |  |
| 260            | 6481 | 2605 |                       |               |                       |                    |       | S S     | Lower contact broken                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                        | 20                  |     |            |     | 2605 | 6-45  | .016          |                    |      |      |  |
| 265            |      |      | 9.5                   | 100           |                       | coarsely<br>banded | fair  | V V     | BASALT: primary features evident, cut by 5%<br>white qtz with here clear qtz increasing to depth<br>two generations of qtz vining: hairline qtz cut<br>by irregular white clear qtz, wk chlorite<br>From 268.5-270: pervasive qtz-carb + 2qtz vn<br>Lower contact sharp.                                                                                                                                                                                                       | patchy<br>chlorite<br>qtz vining       | 5                   | 5   |            | 2   | 2650 | 6-46  |               |                    |      |      |  |
| 270            | 6482 | 2700 |                       |               |                       |                    |       | V V     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                        | 10                  | 8   |            |     | 2700 | 6-47  |               |                    |      |      |  |
| 275            |      |      | 16.5                  | 100           |                       | fault<br>bx        | poor. | ▲▲▲     | FAULT ZONE: basalt host.<br>From 270-270.5: clay (chlorite) gouge with 20%<br>white qtz frags @ 45°<br>From 270.5-271: shattered qtz vn, white to<br>rose, 2/1 disc Py, Tr. AsPy, lower cont 30° shear<br>From 271-272: broken basalt, chlorite slps, 10%<br>white (rose) qtz, 1-2/1 Py.<br>From 272-273: broken qtz vn @ 75°, 1% disc Py<br>From 273-274.5: basalt breccia with 10% qtz frag.<br>From 274.5-286.5: broken basalt with 20%<br>gouge, 10% broken qtz, 1-2/1 Py. | faulted<br>quartz<br>veins             |                     |     |            |     | 20   |       | 20            | 2750               | 6-48 | .025 |  |
| 280            |      |      |                       |               |                       |                    |       | ▲▲▲     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                        |                     | 10  |            |     | 2800 | 6-49  | .003          |                    |      |      |  |
| 285            |      |      |                       |               |                       |                    |       | ▲▲▲     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                        |                     | 100 |            |     |      | 6-50  | .718          |                    |      |      |  |





| DRILL INTERVAL |      | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD                                                                                 | GRAPHIC                                                                            | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ALTERATION and VEINING | MINERAL PERCENTAGES |    |      | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  |  | LAB |  |
|----------------|------|-----------------------|---------------|-----------------------|-----------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|------|-------|---------------|--------------------|--|--|--|--|-----|--|
| FROM           | TO   |                       |               |                       |           |                                                                                     |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 435            |      |                       |               |                       |           |                                                                                     |                                                                                    | <p>TALC/MAGNESITE ROCK:<br/>                     light creamy gray to light gray<br/>                     uniform and massive, talc-rich<br/>                     1-2% very fine <math>Mg</math> decreasing<br/>                     From 433-435: gouged<br/>                     From 440-443: gouged<br/>                     From 450-456: coarsely broken<br/>                     magnesite-rich vein to lens at<br/>                     low angle to C.A.<br/>                     From 472-483: broken with<br/>                     talcous gouge seams.</p> | talcns                 |                     | 60 | 1-2  |       | 1380          | 6-80               |  |  |  |  |     |  |
| 440            |      |                       |               | gouge                 | poor      |    |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       | 1400          | 6-81               |  |  |  |  |     |  |
| 445            |      |                       |               |                       |           |    |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       | 1420          | 6-82               |  |  |  |  |     |  |
| 450            |      |                       |               |                       |           |    |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       | 1440          | 6-83               |  |  |  |  |     |  |
| 455            |      | 480                   | 100           |                       | good      |    |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       | 1530          |                    |  |  |  |  |     |  |
| 460            |      |                       |               |                       |           |    |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 465            |      |                       |               |                       |           |    |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 470            |      |                       |               |                       | gouge     |    |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 475            |      |                       |               |                       | gouge     | fair                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 480            |      |                       |               |                       | gouge     |  |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 485            | 4722 | 4830                  |               |                       |           |                                                                                     |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    | 1830 |       |               |                    |  |  |  |  |     |  |
| 485            |      |                       |               |                       |           | S S                                                                                 |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    | 1880 | 6-84  |               |                    |  |  |  |  |     |  |
| 490            |      |                       |               |                       |           | S S                                                                                 |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 495            |      |                       |               |                       |           | S S                                                                                 |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 500            |      |                       |               |                       |           | S S                                                                                 |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 505            |      |                       |               |                       |           | S S                                                                                 |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |
| 510            |      |                       |               |                       |           | S S                                                                                 |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |                     |    |      |       |               |                    |  |  |  |  |     |  |

SAMPLE 6-460





DIAMOND DRILL HOLE

YJ 86-7





| DRILL INTERVAL | FROM  | TO  | RECOVERED LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE      | ROD  | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                | ALTERATION and VEINING        | MINERAL PERCENTAGES |     |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |       |      |  | LAB   |             |
|----------------|-------|-----|------------------|---------------|-----------------------|----------------|------|---------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------|-----|----|-----|-------|---------------|--------------------|-------|------|--|-------|-------------|
|                |       |     |                  |               |                       |                |      |         |                                                                                                                                        |                               | cc (dob)            | qtz | pl | ASA |       |               | Au opt             |       |      |  |       | Au Screen   |
| 135            | 116.1 | 135 | 4.5              | 100           |                       | massive        | good | V V     | BASALT - typical, 10% qtz veining.<br>QUARTZ: white bull quartz with 20% basalt as angular frag.                                       |                               |                     | 10  |    | tr  |       | 135           | 7-8                |       |      |  |       |             |
| 140            | 12.98 | 140 |                  |               |                       |                |      | OV      |                                                                                                                                        |                               |                     | 80  |    | tr  |       | 140           | 7-10               | 1.063 | 1.30 |  | 0.463 | 2.07        |
| 145            |       |     |                  |               |                       | massive        | good | V V     | BASALT: light gray, bleached, massive with quartz veining to 3mm.<br>From 151 to 155.5: quartz-carb. sheared basalt, foliated 30 to 60 | irregular fine qtz veining    |                     | 5   |    | tr  |       | 145           | 7-11               | 0.029 | 0.34 |  | 0.015 | 0.075       |
| 150            |       |     | 20.5             | 100           | 30-60                 | shear          | poor | V V     |                                                                                                                                        | parasitic qtz-carb.           |                     | 10  | 10 |     |       | 150           | 7-12               | 0.008 | 0.00 |  | 0.010 |             |
| 155            |       |     |                  |               |                       | massive        | good | V V     |                                                                                                                                        |                               |                     |     |    |     |       | 155           | 7-13               | 0.003 |      |  | 0.007 |             |
| 160            | 14.23 | 165 |                  |               |                       | massive        | good | V V     |                                                                                                                                        | fine qtz veining              |                     |     |    |     |       | 160           | 7-14               | 0.004 |      |  | 0.004 |             |
| 165            |       |     |                  |               |                       | massive        | poor | V V     | DIABASE DIKE:<br>medium grained approaching qabbro, massive, coarsely broken, rare qtz-carb vein                                       | fresh.                        |                     |     |    |     |       | 165           | 7-15               | 0.003 |      |  |       |             |
| 170            |       |     |                  |               |                       | shear          | poor | V V     | At 174.0: 5cm shear @ 75°                                                                                                              |                               |                     |     |    |     |       |               |                    |       |      |  |       |             |
| 175            |       |     | 27.5             | 100           |                       | massive        | poor | V V     |                                                                                                                                        |                               |                     |     |    |     |       |               |                    |       |      |  |       |             |
| 180            |       |     |                  |               |                       | massive        | poor | V V     |                                                                                                                                        |                               |                     |     |    |     |       |               |                    |       |      |  |       |             |
| 185            |       |     |                  |               |                       |                |      | V V     |                                                                                                                                        |                               |                     |     |    |     |       |               |                    |       |      |  |       |             |
| 190            | 17.61 | 190 | 4.5              | 100           |                       | fault by       | poor | V V     | FAULT ZONE: quartz with quartz frags + qtz-carb frags, 10% qtz veining intact @ 70° similar fault in 86-6 from 270.0 to 286.5          |                               |                     | 10  | 30 | 1-2 | Tr    | 190           | 7-16               | "     |      |  |       |             |
| 195            | 18.99 | 195 | 8.5              | 100           |                       | massive broken | poor | V V     | BASALT: bleached basalt with irregular qtz-carb veining, shattered with chloritic fractures.                                           | bleached, chloritic fractures |                     | 5   | 3  | Tr  |       | 195           | 7-17               | "     |      |  |       | 7-17 SAMPLE |
| 200            |       |     |                  |               |                       |                |      | V V     |                                                                                                                                        |                               |                     |     |    |     |       | 200           | 7-18               | "     |      |  |       |             |
| 205            | 61.57 | 205 |                  |               |                       | massive        | fair | V V     | ALTERED SERP: pervasive carbonate altered, sheared and broken intervals, local patches qtz.                                            | pervasive carb. patchy qtz.   |                     | 60  | 10 | Tr  |       | 205           | 7-19               | "     |      |  |       |             |
| 210            |       |     |                  |               |                       | good           | good | V V     | At 205.5: 5cm quartz @ 90°                                                                                                             |                               |                     |     |    |     |       | 210           | 7-20               | "     |      |  |       |             |

PROJECT YELLOW JACKET HOLE DESIGNATION 86-7 LOGGED BY J. WATKINS SCALE 1cm = 5 feet PAGE 4 OF 5

| DRILL INTERVAL |        | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE         | ROD  | GRAPHIC                   | ROCK TYPE (DESCRIPTION)                                                                                                                         | ALTERATION and VEINING          | MINERAL PERCENTAGES |         |          |        | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  | LAB |  |
|----------------|--------|-----------------------|---------------|-----------------------|-------------------|------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------|---------|----------|--------|-------|---------------|--------------------|--|--|--|-----|--|
| FROM           | TO     |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 | Qtz (%)             | Plg (%) | Calc (%) | Px (%) |       |               |                    |  |  |  |     |  |
| 210            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 215            |        |                       | 100           |                       | quartz<br>quartz  | good | S S<br>75°<br>S<br>S<br>S | At 213.0: 10 cm fault quartz<br>At 216.0: 5 cm fault quartz<br>Lower contact sharp @ 60°                                                        | permissive<br>qtz + carb.       | 40                  | 20      |          | 2      |       |               |                    |  |  |  |     |  |
| 220            | 214.5  | 218.0                 |               |                       | massive<br>broken | poor | / /<br>/ /<br>/ /         | DIABASE DIKE: typical, fig.<br>coarsely broken.                                                                                                 | fresh.                          |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 225            |        | 10.0                  | 100           |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 230            | 229.99 | 228.0                 |               |                       |                   |      |                           | SERPENTINITE:<br>light gray, massive, foliated,<br>cut by irregular qtz-carb veins<br>with rare chloritic quartz<br>vein to 250', w/ky talcoss. | permissive<br>talc,<br>qtz carb | 20                  | 5       | (10)     | 1%     |       |               |                    |  |  |  |     |  |
| 235            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 240            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 245            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 250            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 255            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 260            |        |                       |               |                       |                   |      |                           | grading to typical serp.<br>with fine diss magnetite.                                                                                           |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 265            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 270            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 275            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 280            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |
| 285            |        |                       |               |                       |                   |      |                           |                                                                                                                                                 |                                 |                     |         |          |        |       |               |                    |  |  |  |     |  |

SAMPLE 7-249



DIAMOND DRILL HOLE

YJ 86-8







| DRILL INTERVAL | RECOVERED LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE      | ROD                | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                     | ALTERATION AND VEINING           | MINERAL PERCENTAGES |    |   |       | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |           |       | LAB          |
|----------------|------------------|---------------|-----------------------|----------------|--------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------|----|---|-------|-------|---------------|--------------------|-----------|-------|--------------|
|                |                  |               |                       |                |                    |         |                                                                                                                                                                                             |                                  | Py                  | As | S | Other |       |               | Au opt             | Screen Au | Other |              |
| 135            |                  |               |                       |                |                    | SS      | Altered serp: as on page 1 and 2                                                                                                                                                            |                                  |                     |    |   |       |       |               |                    |           |       |              |
| 140            |                  |               |                       |                |                    | SS      |                                                                                                                                                                                             |                                  |                     |    |   | 140.0 |       |               |                    |           |       |              |
| 145            |                  | 23.7          | 100                   | 6 @ 1/2"       | massive            | fair    |                                                                                                                                                                                             | 20% Fe-stained calcite shnk.     |                     |    |   | 145.0 | 8-1   | "             |                    |           |       | SAMPLE B-17  |
| 150            |                  |               |                       |                |                    | SS      |                                                                                                                                                                                             |                                  |                     |    |   | 150.0 | 8-2   | "             |                    |           |       |              |
| 155            |                  |               |                       |                |                    | SS      | At 155.0: 10cm wide Fe-stained carb. zone at 80 to CA.                                                                                                                                      |                                  |                     |    |   | 155.0 | 8-3   | "             |                    |           |       |              |
| 160            | 152.7            |               |                       |                |                    | SS      | Lower contact broken.                                                                                                                                                                       |                                  |                     |    |   | 158.1 | 8-4   | "             |                    |           |       |              |
| 165            | 157.7            | 7.5           | 100                   | ink dot @ 1/2" | massive            | poor    | QUARTZ/CARBONATE Rock: strong Fe-stain 5-10% white quartz vein with minor rose qtz, soft and pervasively crushed with broken qtz frags., wily texture qtz-carb vns @ 45°                    | calcite rich 5-10% qtz           | Fr.                 |    |   | 162.7 | 8-5   | "             |                    |           |       |              |
| 170            | 166.2            |               |                       |                | fault?             |         | Lower contact broken, marked by 10cm tale.                                                                                                                                                  |                                  |                     |    |   | 166.2 | 8-6   | "             |                    |           |       |              |
| 175            |                  |               | 100                   |                | strongly fractured | poor    | BASALT: med. grey, chlorite soiled after melt phase, 5%-1mm wide irregular qtz veins From 177-177.5: broken with soft white clear waxy qtz-carb, broken badly with chlorite fracture planes |                                  | 1% this desc.       |    |   | 171.2 | 8-7   | 0.002         |                    |           |       |              |
| 180            | 177.0            |               |                       |                | fault bx.          | poor    | FAULT ZONE: predominantly basalt fragments with 10-20% qtz+qtz/carb in Fe-stained gouge. Lost core probably at lower contact.                                                               | 10-20% qtz/carb                  | Fr.                 |    |   | 177.0 | 8-8   | "             |                    |           |       |              |
| 185            | 182.0            | 5.2           | 100                   |                | massive            | good    | QUARTZ/CARBONATE ROCK: predom. Fe-stained calcite (60%), irregular vein by white qtz-carb, Lower contact broken sharp @ 85°                                                                 | calcite rich 5% qtz              | Fr.                 |    |   | 182.0 | 8-9   | 0.002         |                    |           |       |              |
| 190            | 187.2            |               |                       |                | massive            | good    | QUARTZ/CARBONATE ROCK: creamy grey, mottled with clear grey calcite, 10% patchy qtz, 5% white qtz vein From 191.5-193.0: 70% Fe-stained carb.                                               | calcite (60%) rich 15% qtz       | 1-2% this desc.     |    |   | 188.0 | 8-10  | "             |                    |           |       |              |
| 195            |                  | 12.8          | 150                   |                |                    |         | Lower contact sharp and sheared @ 45° over 10cm.                                                                                                                                            |                                  |                     |    |   | 191.0 | 8-11  | "             |                    |           |       |              |
| 200            | 200.0            |               |                       |                | broken             | fair    | BASALT: medium grey qtz, 10% grading to 20% qtz vns, white and clear qtz with carb viny alteration holes. 0.5' lost core at lower contact.                                                  | 10-20% quartz rich 5% this desc. | 5% this desc.       | 1% |   | 200.0 | 8-12  | "             |                    |           | 0.005 |              |
| 205            | 205.7            | 5.2           | 90                    |                | fault              | poor    | FAULT: broke Fe-stained qtz-carb + 50% gouge. 0.5' lost core at lower contact.                                                                                                              | 10-20% quartz rich 5% this desc. | 5% this desc.       | 1% |   | 205.7 | 8-13  | 0.02          |                    |           | 0.016 | SAMPLE B-20A |
| 210            | 207.5            | 2.5           | 100                   |                |                    |         | QUARTZ/CARBONATE ROCK: light to creamy grey, 10-20% qtz, irregularly veined with clear qtz (to 10% on 0.5' scale) averaging 3%                                                              | 95-carb.                         |                     |    |   | 207.5 | 8-14  | 0.004         |                    |           | 0.014 |              |
|                |                  |               |                       |                |                    |         |                                                                                                                                                                                             |                                  |                     |    |   | 207.5 | 8-15  | "             |                    |           |       |              |



| DRILL INTERVAL | RECOVERED LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD  | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                | ALTERATION and VEINING                       | MINERAL PERCENTAGES |                                                                                                                     |  |       | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |      |       |  | LAB |
|----------------|------------------|---------------|-----------------------|-----------|------|---------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------|--|-------|-------|---------------|--------------------|------|-------|--|-----|
|                |                  |               |                       |           |      |         |                                                                                                                                        |                                              | P <sub>4</sub>      | As <sub>4</sub>                                                                                                     |  |       |       |               |                    |      |       |  |     |
| 285            |                  |               |                       |           |      | S S     | From 293.2 to 302.0: light grey with 20% dolomite vining cut by 5% vuggy clear qtz, 1% dk. P <sub>4</sub>                              | dolomite + qtz vining                        | 1%                  |                                                                                                                     |  |       |       |               |                    |      |       |  |     |
| 290            |                  | 17.0          | 100                   | massive   | good | S S     |                                                                                                                                        |                                              |                     |                                                                                                                     |  |       |       |               |                    |      |       |  |     |
| 295            |                  |               |                       |           |      | S S     | At 300.0: 5cm dk grey calcite-rich vein with 3% fine P <sub>4</sub> , etc. to ch. Lower contact sharp @ 45°                            |                                              |                     |                                                                                                                     |  |       |       |               |                    |      |       |  |     |
| 300            | 292.5 - 300.0    |               |                       |           |      | S S     |                                                                                                                                        |                                              |                     |                                                                                                                     |  |       |       |               | 297.6              | 8-22 | ✓     |  |     |
| 305            | 300.0 - 306.5    | 4.5           | 100                   | broken    | poor | Db      | DIABASE DIKE: P <sub>4</sub> , dk gm quartz from 304 to 306.5                                                                          | Fresh.                                       |                     |                                                                                                                     |  | 302.0 | 8-23  | ✓             |                    |      |       |  |     |
| 310            |                  |               |                       |           |      | S S     | ALTERED SERP.: medium grey, mottled light grey intervals, dolomite. From 306.5 to 307.5: quartz, minor qtz frags, tr. P <sub>4</sub> . | porphyritic dol + calcite vining + vuggy qtz | 1%                  |                                                                                                                     |  |       |       |               |                    |      |       |  |     |
| 315            |                  |               |                       | massive   |      | S S     |                                                                                                                                        |                                              |                     | From 307.5 to 332.2: calcite vined, healed by with 1-2% vuggy white qtz, appears mottled fractured, calcite healed. |  |       |       |               | 306.5              | 8-24 | ✓     |  |     |
| 320            |                  | 26.0          | 100                   |           | good | S S     | Lower contact sharp, marked by 4cm calcite minor qtz in @ 60°, 1-2% P <sub>4</sub>                                                     |                                              |                     |                                                                                                                     |  |       |       |               |                    |      |       |  |     |
| 325            |                  |               |                       |           |      | S S     |                                                                                                                                        |                                              |                     |                                                                                                                     |  |       |       |               | 315                | 8-26 | 0.002 |  |     |
| 330            |                  |               |                       |           |      | S S     | ALTERED SERP.: med grey gm, white spotted, massive, talcous                                                                            | Talc rich                                    |                     |                                                                                                                     |  |       |       |               |                    |      |       |  |     |
| 335            | 332.5 - 342      | 12.5          | 100                   | massive   | good | S S     |                                                                                                                                        |                                              |                     | Lower contact sharp 45°                                                                                             |  |       |       |               | 325                | 8-27 | 0.003 |  |     |
| 340            |                  |               |                       |           |      | S S     | DIABASE DIKE: typical. From 350.4 to 357.5: talcous section @ 60°                                                                      | Fresh.                                       |                     |                                                                                                                     |  |       |       |               |                    |      |       |  |     |
| 345            | 342 - 350        |               |                       |           |      | S S     |                                                                                                                                        |                                              |                     |                                                                                                                     |  |       |       |               | 329                | 8-28 | 0.003 |  |     |
| 350            | 350 - 357.0      | 12.0          | 100                   | broken    | fair | Db      |                                                                                                                                        |                                              |                     |                                                                                                                     |  | 332   |       |               |                    |      |       |  |     |
| 355            |                  |               |                       |           |      | S S     | Lower contact at 20'                                                                                                                   |                                              |                     |                                                                                                                     |  |       |       |               |                    |      |       |  |     |
| 360            |                  | 3.0           | 100.0                 |           |      | S S     | ALTERED SERP.                                                                                                                          |                                              |                     |                                                                                                                     |  |       |       |               |                    |      |       |  |     |

SAMPLE 8-34



DIAMOND DRILL HOLE

YJ 86-9



| DRILL INTERVAL     | RECOVERED LENGTH | % CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE         | ROD          | GRAPHIC           | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                   | ALTERATION and VENEING          | MINERAL PERCENTAGES |    |  |              | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |             | LAB |
|--------------------|------------------|-----------------|-----------------------|-------------------|--------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------|----|--|--------------|-------|---------------|--------------------|--|--|-------------|-----|
|                    |                  |                 |                       |                   |              |                   |                                                                                                                                                                                                                                                           |                                 | Py                  | As |  |              |       |               | As ppt.            |  |  |             |     |
| 60<br>18.50 - 57.7 |                  |                 |                       |                   |              | S S               | SERP: dk grn as above, calcite spotted partly Fe-stained, 10% 1mm calcite vng @ 40° plus irregular vng, relatively fresh                                                                                                                                  | calcite spotted and vng.        |                     |    |  |              |       |               |                    |  |  |             |     |
| 65<br>70           |                  | 100             |                       | massive           | good         | S S<br>S S<br>S S |                                                                                                                                                                                                                                                           |                                 |                     |    |  |              |       |               |                    |  |  |             |     |
| 75<br>2338 - 767   |                  |                 |                       |                   |              | S S               | Lower contact broken sharp @ 70°                                                                                                                                                                                                                          |                                 |                     |    |  |              |       |               |                    |  |  |             |     |
| 80<br>2515 - 825   |                  | 100             |                       | massive<br>Fault  | good<br>Fair | X X<br>X X<br>X X | INTERMEDIATE DIKE: as before, massive dk, granular from 80.5-82.5; fault by + zone lower contact sharp @ 60°                                                                                                                                              | porous calcite                  |                     |    |  | 825          |       |               |                    |  |  | Sample 9-7B |     |
| 85<br>90           |                  | 100             |                       | crushed to broken | good         | S S<br>S S        | ALTERED SERP.: crgy gray, 10% dk mottled, coarsely crushed to irregularly fractured, no carbonate, no sulphide                                                                                                                                            | strongly talcous                |                     |    |  |              | 9-1   | <.002         |                    |  |  |             |     |
| 95<br>2795 - 977   |                  | 100             |                       | massive           | good         | X X<br>X X        | INTERMEDIATE DIKE: as above, 10/1-2 mm calcite vng, 1-2% Fe stained patches, lower contact broken sharp @ 35°                                                                                                                                             | porous calcite                  |                     |    |  | 977          |       |               |                    |  |  |             |     |
| 100<br>2987 - 980  |                  |                 |                       |                   |              | S S               | SERP: dk grn to mottled med. gray grn, 5% disc grading to unred Fe-stained calcite all cut by 20% grading to 5% white calcite from 980-101.0; 20% white calcite @ 40° with 5% quartzous patches from 1080-109.7; 20% white calcite + 60% Fe-stained carb. | calcite vng                     |                     |    |  | 980          |       |               |                    |  |  |             |     |
| 105<br>110         |                  | 100             |                       | massive           | good         | S S<br>S S<br>S S |                                                                                                                                                                                                                                                           |                                 |                     |    |  | 1030         |       |               |                    |  |  |             |     |
| 115<br>2577 - 1154 |                  |                 |                       |                   |              | S S               | Fault: dk calcite fine grading to qtz carb by steep with lined by and clear at 107.9°                                                                                                                                                                     | 107.9B                          | 1%                  | Tr |  | 1154         |       |               |                    |  |  |             |     |
| 120<br>125         |                  | 100             |                       | massive           | good         | S S<br>S S<br>S S | ALTERED SERP.: creamy gray, mottled dk gray, from 121-122: holed shear @ 30° from 129-133; 20% potash Fe stained calcite                                                                                                                                  | non efflu carb dolomite (trace) |                     |    |  | 1174         |       |               |                    |  |  |             |     |
| 130<br>135         |                  | 100             |                       | broken            | broken       | X X               | Lower contact broken sharp @ 30°                                                                                                                                                                                                                          |                                 |                     |    |  | 1280         |       |               |                    |  |  |             |     |
| 135<br>415 - 1350  |                  | 100             |                       | broken            | broken       | X X               | inter. dike: irregularly stained                                                                                                                                                                                                                          | calcite                         | 1%                  |    |  | 1330<br>1350 |       |               |                    |  |  |             |     |



| DRILL INTERVAL | FROM METERS | TO FEET | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE                   | ROD  | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                                                                                   | ALTERATION and VEINING                               | MINERAL PERCENTAGES |                                |  |      | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY             |       |  |                 | LAB |
|----------------|-------------|---------|-----------------------|---------------|-----------------------|-----------------------------|------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------|--------------------------------|--|------|-------|---------------|--------------------------------|-------|--|-----------------|-----|
|                |             |         |                       |               |                       |                             |      |         |                                                                                                                                                                                                                                                                                                                                                           |                                                      | Py                  | As <sub>2</sub> S <sub>3</sub> |  |      |       |               | As <sub>2</sub> S <sub>3</sub> |       |  |                 |     |
| 135            |             |         |                       |               |                       |                             |      |         | ALTERED SERP as above, broken                                                                                                                                                                                                                                                                                                                             | Fe-stained<br>cc<br>min                              |                     |                                |  |      |       |               |                                |       |  |                 |     |
| 140            | 43.28       | 142.0   |                       | 150           |                       | broken                      | good | S S     | 30% patchy Fe-stained calcite, 10% calcite vining                                                                                                                                                                                                                                                                                                         |                                                      |                     |                                |  | 1420 | 9-11  | 5002          |                                |       |  |                 |     |
| 145            | 43.89       | 144.0   |                       | 150           |                       | quartz                      | poor | S S     | FAULT: altered serp zone                                                                                                                                                                                                                                                                                                                                  |                                                      |                     |                                |  | 1440 | 9-12  | 5002          |                                |       |  |                 |     |
| 150            | 45.90       | 150.6   |                       |               |                       | broken                      | poor | X X     | INTER. DIKE: as before,<br>From 144-144.5: quartz<br>Lower contact broken                                                                                                                                                                                                                                                                                 | porphyritic<br>cc                                    |                     |                                |  | 1506 | 9-13  | 5002          |                                |       |  |                 |     |
| 155            |             |         |                       | 150           |                       | massive<br>partly<br>broken | fair | S S     | ALTERED SERP: creamy gray, mottled dk<br>gray, irregularly vined with cc,<br>porphyritic dolomite                                                                                                                                                                                                                                                         | cc vining<br>porph. dolo                             | 2%                  |                                |  | 1560 | 9-14  | 5002          |                                |       |  |                 |     |
| 160            | 47.22       | 161.5   |                       |               |                       |                             |      | S S     | From 152-153: cc altered inter-dike<br>From 153-153.5: serp zone<br>From 153.5-154: 80% Fe-stained<br>Lower contact sharp @ 80°                                                                                                                                                                                                                           |                                                      |                     |                                |  | 1615 | 9-15  | 0.005         |                                |       |  | Sample<br>9-156 |     |
| 165            |             |         |                       |               |                       |                             |      | X X     | INTER. DIKE (BASALT?) bleached, massive with<br>melt phenos (qtz) to 2mm now chlorite, feldspar<br>From 161.5-161.8: quartz                                                                                                                                                                                                                               | 10% qtz<br>+ qtz/carb<br>vining<br>pyrrhotite.       | 1%                  | Tr.                            |  | 1665 | 9-16  | 5002          |                                | 0.002 |  | Sample<br>9-163 |     |
| 170            |             |         |                       | 100           |                       | broken                      | fair | X X     | From 161.8-161.8: irregularly to orientated @ 45° qtz carb vining<br>From 161.8-161.8: white + gray qtz @ 45° with VG<br>At 170: 10cm quartz @ 45° disrupting 0.3 qtz carb vining<br>From 170-172: 40% qtz carb irregular vining and<br>silicification @ 171.2-172 VG<br>From 172-173.5: 10-15% qtz/carb vining @ 45° to<br>5mm, some bleached halos 3/Py |                                                      |                     |                                |  | 1725 | 9-17  | VG            |                                | 0.553 |  | 3318            |     |
| 175            | 54.10       | 177.5   |                       |               |                       |                             |      | X X     |                                                                                                                                                                                                                                                                                                                                                           |                                                      | 8%                  |                                |  | 1775 | 9-18  | 0.020         |                                | 0.025 |  | 1               |     |
| 180            |             |         |                       | 100           |                       | massive                     | good | Q       | QUARTZ/CARBONATE ROCK:<br>From 177.5-180.5: qtz-melt (50%) in carb host<br>+ angular inter. dike frags<br>From 180.5-185.3: creamy gray, mottled dk, to 181.8 Fe-stain<br>Lower contact Fe-stained shear @ 30°                                                                                                                                            |                                                      | 1%                  |                                |  | 1830 | 9-19  | 0.002         |                                | 0.004 |  |                 |     |
| 185            | 56.48       | 185.3   |                       |               |                       |                             |      | Q       |                                                                                                                                                                                                                                                                                                                                                           |                                                      | 3%                  |                                |  | 1853 | 9-20  | 5002          |                                | 0.004 |  |                 |     |
| 190            |             |         |                       |               |                       | irregular<br>broken         | fair | X X     | INTER. DIKE (BASALT?) as before, broken,<br>10/irregular qtz-carb vining to 3mm thick<br>1/ grading to 3/Py                                                                                                                                                                                                                                               |                                                      | 1%                  | Tr.                            |  | 1890 | 9-21  | 5002          |                                |       |  | Sample<br>9-190 |     |
| 195            |             |         |                       |               |                       |                             |      | X X     | At 186.3: 10cm quartz<br>At 193.0: 10cm clay zone<br>At 198: 10cm clay zone @ 70°                                                                                                                                                                                                                                                                         |                                                      |                     |                                |  | 1950 | 9-22  | 0.002         |                                | 0.003 |  |                 |     |
| 200            | 61.26       | 201.0   |                       |               |                       |                             |      | X X     | Lower contact sharp @ 70°                                                                                                                                                                                                                                                                                                                                 |                                                      | 3%                  |                                |  | 2010 | 9-23  | 0.248         |                                | 0.210 |  |                 |     |
| 205            |             |         |                       |               |                       | massive                     | good | Q       | QUARTZ/CARBONATE ROCK: massive, light to<br>creamy gray, carb(dolo) rich, 20% calcite vining,<br>to 5% qtz and qtz/carb vining                                                                                                                                                                                                                            | porphyritic<br>dolomite<br>cc and<br>qtz/carb vining | 1%                  | Tr.                            |  | 2060 | 9-24  | 0.002         |                                | 0.004 |  |                 |     |
| 210            |             |         |                       |               |                       |                             |      | Q       | From 201-204: 70% Fe-stained<br>At 204: 10cm clay zone @ 80°                                                                                                                                                                                                                                                                                              |                                                      |                     |                                |  | 2110 |       |               |                                |       |  |                 |     |

| DRILL INTERVAL |         | RECOVERED CORE LENGTH | % CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD       | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                       | ALTERATION AND VEINING | MINERAL PERCENTAGES |  |  |  |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |                    |       | LAB          |
|----------------|---------|-----------------------|-----------------|-----------------------|-----------|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--|--|--|-----|-------|---------------|--------------------|--|--------------------|-------|--------------|
| FROM METERS    | TO FEET |                       |                 |                       |           |           |         |                                                                                                                                                                                                                                                                                               |                        | P <sub>1</sub>      |  |  |  |     |       |               |                    |  | A <sub>4</sub> opt |       |              |
| 210            |         |                       |                 |                       |           |           | 10      | From 205.5 to 207.5: total Fe-stained                                                                                                                                                                                                                                                         |                        |                     |  |  |  | 210 |       |               |                    |  |                    |       |              |
|                |         |                       |                 |                       |           |           | 10      |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 215   | 9-25          | 0.004              |  |                    | 0.007 |              |
| 220            |         |                       | 100             |                       | massive   | very good | 10      |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 220   | 9-26          | <.002              |  |                    | 0.002 |              |
|                |         |                       |                 |                       |           |           | 10      |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 225   | 9-27          | <.002              |  |                    |       |              |
|                |         |                       |                 |                       |           |           | 10      |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 230   | 9-28          | <.002              |  |                    |       |              |
|                |         |                       |                 |                       |           |           | 10      |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 235   | 9-29          | <.002              |  |                    |       |              |
| 235            | 71.63   | 235.0                 |                 |                       |           |           | S S     | ALTERED SHEAR: medium to mottled dk gray pervasive carb (dab) alteration, x-cut by calcite and qb/carb vining to 15%<br>1-5% patchy qb, local traces of AsP <sub>1</sub><br>From 235-245: 10-20% Fe-stained<br>At 245.5: 10 cm clay gouge<br>From 262-264: instead fracture w/ qb/carb healed |                        |                     |  |  |  | 235 |       |               |                    |  |                    |       |              |
|                |         |                       |                 |                       |           |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 240   | 9-30          | <.002              |  |                    |       |              |
|                |         |                       |                 |                       |           |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 245   | 9-31          | <.002              |  |                    |       |              |
|                |         |                       |                 |                       |           |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 250   | 9-32          | <.002              |  |                    |       |              |
|                |         |                       | 100             |                       | massive   |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 255   | 9-33          | <.002              |  |                    |       | Sample 9-255 |
|                |         |                       |                 |                       |           |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 260   | 9-34          | <.002              |  |                    |       |              |
|                |         |                       |                 |                       |           |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  | 265 | 9-35  | <.002         |                    |  |                    |       |              |
|                |         |                       |                 |                       |           |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  | 270 | 9-36  | <.002         |                    |  |                    |       |              |
| 270            | 82.45   | 270.5                 |                 |                       |           |           | S S     | ALTERED - SHEARED SCLP: med to light emy gray, broken and sheared @ 45° to 60°, now healed by 20% calcite vining, 5% qb-carb vining to 2cm @ 30°-45°, 20% mottled gray patches<br>At 275: 5cm clay gouge.<br>From 287.5-289.3                                                                 |                        |                     |  |  |  | 270 |       |               |                    |  |                    |       |              |
|                |         |                       |                 |                       |           |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 275   | 9-37          | <.002              |  |                    |       |              |
|                |         |                       |                 |                       |           |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 280   | 9-38          | 0.003              |  |                    |       |              |
|                |         |                       |                 |                       |           |           | S S     |                                                                                                                                                                                                                                                                                               |                        |                     |  |  |  |     | 285   | 9-39          | <.002              |  |                    |       |              |



| DRILL INTERVAL | FROM METERS | TO FEET | RECOVERED CORE LENGTH | % CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD  | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ALTERATION AND VEINING          | MINERAL PERCENTAGES |     |  |       | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |     |  |             | LAB |
|----------------|-------------|---------|-----------------------|-----------------|-----------------------|-----------|------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------|-----|--|-------|-------|---------------|--------------------|-----|--|-------------|-----|
|                |             |         |                       |                 |                       |           |      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Py                  | Abx |  |       |       |               | Ag                 | gpt |  |             |     |
| 360            |             |         |                       |                 |                       |           |      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                     |     |  |       | 300   |               |                    |     |  |             |     |
| 365            | 111.50      | 365.8   |                       | 100             |                       | light     | poor |         | Lower contact broken<br>Basalt mixed basalt and qtz/carb. 70% clay, 20% dolomite, 10% quartz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                 |                     |     |  | 358   | 9-56  | 4002          |                    |     |  |             |     |
| 370            | 112.01      | 367.5   |                       | 100             |                       | massive   | good |         | QUARTZ/CARB. ROCK: dolomite rich, broken and bedded by 5-10% qtz/carb. min. At 367.5: 10cm white qtz, broken at upper contact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | dol-rich<br>qtz/carb<br>veining | 1-2%                |     |  | 370   | 9-57  | 0.04          |                    |     |  |             |     |
| 375            | 115.06      | 377.5   |                       | 100             |                       |           |      |         | Lower contact broken                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                 |                     |     |  | 377.5 | 9-58  | 4002          |                    |     |  |             |     |
| 380            | 117.04      | 384.0   |                       | 100             |                       | broken    | fair |         | BASALT (INTRUSIVE?): interbedded broken with 20% interstitial quartz At 381-0.1ft qtz in @ 60°                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Fresh                           | <1%                 |     |  | 384.0 | 9-59  | 4002          |                    |     |  |             |     |
| 385            |             |         |                       | 100             |                       |           |      |         | QUARTZ/CARB. ROCK: as before From 391-393: 5% coarse pyrite patches.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                 | 4%                  |     |  | 390   | 9-60  | 0.002         |                    |     |  |             |     |
| 390            | 119.79      | 393.0   |                       | 97              |                       | broken    | poor |         | Lower contact broken                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                 | 5%                  |     |  | 393.0 | 9-61  | 4002          |                    |     |  |             |     |
| 395            |             |         |                       |                 |                       |           |      |         | BASALT (INTRUSIVE?): medium brown, distinct fine leucocrone spotted, fresh looking but soft (penetrative tale?), brecciated throughout with clay quartz intervals From 393-396.5: intact matrix poor, subord frags 1-2cm with lower contact sharp @ 35° with 5% talc qtz/carb. From 396.5-408.5: coarsely broken, 30% qtz/carb min. From 399.5 to 400.5; 407.5 to 408.5: 40% white qtz frags. From 408.5-411: granular from above to bleached (carb + tale) related to 10-20 qtz/carb/talc vein to 10 cm with tr. Py. From 411-420: badly broken with clay quartz intervals with 1 foot bot core at lower contact. From 420-424: intact br ax at upper contact | talc                            |                     |     |  | 398.5 | 9-62  | 0.005         |                    |     |  |             |     |
| 400            |             |         |                       |                 |                       |           |      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                     |     |  | 403.5 | 9-63  | 0.002         |                    |     |  | Sample 9-63 |     |
| 405            |             |         |                       |                 |                       |           |      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                     |     |  | 408.5 | 9-64  | 4002          |                    |     |  |             |     |
| 410            |             |         |                       |                 |                       |           |      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                     |     |  | 410   | 9-65  | "             |                    |     |  |             |     |
| 415            |             |         |                       |                 |                       |           |      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                     |     |  | 415.0 | 9-66  | "             |                    |     |  |             |     |
| 420            |             |         |                       |                 |                       |           |      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                     |     |  | 420   | 9-67  | "             |                    |     |  |             |     |
| 425            | 129.24      | 424.0   |                       | 100             |                       | broken    | poor |         | Lower contact broken                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                 |                     |     |  | 424.0 | 9-68  | "             |                    |     |  |             |     |
| 430            |             |         |                       |                 |                       |           |      |         | TALC/CARB. ROCK: very grey, medium grey mottled, tale rich + dolomite, cut by 10% calcite vns to 0.5cm wide From 424-428.3: crinoid and broken with 2% qtz trap to 0.5cm From 429-431: qtz-rich in crudely banded with minor talc/carb, all cut by irregular clear qtz                                                                                                                                                                                                                                                                                                                                                                                         |                                 | 1%                  | Tr  |  | 429.0 | 9-69  | 4002          |                    |     |  |             |     |
| 435            |             |         |                       |                 |                       |           |      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                     |     |  | 430   | 9-70  | 0.002         |                    |     |  |             |     |
|                |             |         |                       |                 |                       |           |      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                     |     |  | 435.0 | 9-71  | 4002          |                    |     |  |             |     |



DIAMOND DRILL HOLE

YJ 86-10















DIAMOND DRILL HOLE

YJ 86-11



PROJECT Yellowjacket HOLE DESIGNATION YJ 86-11 LOGGED BY PAR SCALE 1 cm = 1 m PAGE 2 OF 17

| DRILL INTERVAL | FROM  | TO | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                        | ALTERATION and VEINING | MINERAL PERCENTAGES |  |  |  |  | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |    |     | LAB |  |  |  |  |
|----------------|-------|----|-----------------------|---------------|-----------------------|-----------|-----|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--|--|--|--|-------|---------------|--------------------|----|----|-----|-----|--|--|--|--|
|                |       |    |                       |               |                       |           |     |         |                                                                                                                                                                |                        |                     |  |  |  |  |       |               | Au                 | FA | Au | qtz |     |  |  |  |  |
| 49             | 49.38 |    |                       |               |                       |           |     | v v     |                                                                                                                                                                |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 50             |       |    | 1.41                  | 92.8          |                       |           |     | v v v   |                                                                                                                                                                |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 51             | 50.90 |    |                       |               |                       |           |     | v v v   | 50.85-51 Ep. on fract.                                                                                                                                         | TTT                    |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 52             |       |    | 1.43                  | 93.5          |                       |           |     | v v v   | 52.43-52.51 silicified; then brx and sericitized.                                                                                                              | st, qt                 |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 53             | 52.43 |    |                       |               |                       |           |     | v v v   |                                                                                                                                                                |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 54             |       |    | 1.09                  | 97.3          |                       |           |     | v v v   | 54-54.13 minor qt and ca veinlets.                                                                                                                             |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 55             | 53.55 |    | 1.62                  | 1.39          | 85.8                  |           |     | v v v   | 54.9 Ca veinlet at 55°                                                                                                                                         |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 56             | 55.17 |    | 1.52                  | 1.44          | 94.7                  |           | 30  | v v v   | 55.05 minor qt veinlet at 70°                                                                                                                                  |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 57             | 56.69 |    |                       |               |                       |           |     | v v v   | 55.37-55.40 Minor sericite shear with ca veinlets                                                                                                              |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 58             |       |    | 1.44                  | 1.23          | 85.4                  |           | 20  | v v v   |                                                                                                                                                                |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 59             | 58.13 |    |                       |               |                       |           |     | v v v   | 58-58.13 broken, rubble                                                                                                                                        |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 60             |       |    | 1.52                  | 1.47          | 96.7                  |           | 10  | v v v   |                                                                                                                                                                |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 61             | 59.65 |    |                       |               |                       |           |     | v v v   | 60.82-60.95 Fractures healed by chlorite                                                                                                                       | chl                    |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 62             |       |    | 1.61                  | 1.44          | 89.4                  |           | 15  | v v v   |                                                                                                                                                                |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 63             | 61.26 |    |                       |               |                       |           |     | v v v   | 61.26-62.20 vfg, black, dense mixture of quartz, (biotite?) and feldspar. 1% ovoid fragments white-grey quartz, up to 6cm. Contacts irregular. (v.g. trace!)   |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 64             |       |    | 1.53                  | 1.49          | 97.4                  |           | 30  | v v v   | 62.20-70.50 Andesite. Similar to 43.05-61.26. Fg.-mg. quartz, biotite and sp. Fractured; otherwise massive. Equigranular, lacks texture. Resembles fg biotite. | qt-bi                  |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 65             | 62.79 |    | 0.91                  | 0.87          | 95.6                  |           | 2.5 | v v v   |                                                                                                                                                                |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |
| 66             | 63.70 |    | 0.61                  | 0.47          | 77.0                  |           | 40  | v v v   |                                                                                                                                                                |                        |                     |  |  |  |  |       |               |                    |    |    |     |     |  |  |  |  |

Note: < means less than 0.07 g/t

100

0 0

55 ca  
55 qt  
55, ca

chl  
TTT

qt-bi

15  
st

st

61.26  
tr

62.2-4871











| DRILL INTERVAL | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD         | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                       | ALTERATION and VEINING | MINERAL PERCENTAGES |    |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  | LAB |
|----------------|-----------------------|---------------|-----------------------|-----------|-------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|----|----|-----|-------|---------------|--------------------|--|--|--|-----|
|                |                       |               |                       |           |             |         |                                                                                                                                               |                        | FROM                | TO | FA | Au | gpt |       |               |                    |  |  |  |     |
| 109            |                       |               |                       |           |             |         |                                                                                                                                               |                        |                     |    |    |    |     |       |               |                    |  |  |  |     |
| 110            | 1.59                  | 1.50          | 94.3                  |           | 15          |         | 110-110.15 Dense cluster quartz fragments up to 5cm long.                                                                                     | st                     |                     |    |    |    |     | 4893  | <             |                    |  |  |  |     |
| 111            | 0.91                  | 0.71          | 78.0                  |           | 35          | v v     | 110.2-111.3 Very broken. Pale green sericite on most fractures.                                                                               | st                     |                     |    |    |    |     | 4894  | <             |                    |  |  |  |     |
| 112            | 1.52                  | 1.35          | 88.8                  |           | 15          | v v     | 111.3-112.5 Pale green st on most fractures.                                                                                                  | st                     |                     |    |    |    |     | 4895  | <             |                    |  |  |  |     |
| 113            | 0.92                  | 0.80          | 95.7                  |           | 20          | v v     | 110.1-115.6 Andesite. Mx-st, equigranular. 20% mafics (bix hb). 15%-20% gt. saussiturized plag. Lacks gt fragments of unit above.             | st<br>Ca Ca            |                     |    |    |    |     | 4896  | <             |                    |  |  |  |     |
| 114            | 1.37                  | 1.08          | 78.8                  |           | 35          | v v     | Characteristic alteration is pale green st on fractures.                                                                                      | st<br>bleached         |                     |    |    |    |     | 4897  | <             |                    |  |  |  |     |
| 115            | 1.43                  | 1.02          | 71.3                  |           | 30          |         | 111.7-112.3 Long fracture sub-ll axis, lined with 2mm st.                                                                                     | st<br>Ca               |                     |    |    |    |     | 4898  | <             |                    |  |  |  |     |
| 116            | 1.61                  | 1.45          | 90.1                  |           | Fault gouge |         | 112.5-114.2 Altn. primarily calcite, as 1mm-2mm veinlets.                                                                                     | st<br>Ca               |                     |    |    |    |     | 4899  | <             |                    |  |  |  |     |
| 117            | 1.61                  | 1.45          | 90.1                  |           | Fault gouge |         | 114.2-115.6 Broken, rubble, fault gouge. Increasingly bleached, sericite.                                                                     | st<br>Ca               |                     |    |    |    |     | 4900  | <             |                    |  |  |  |     |
| 118            | 1.53                  | 1.42          | 92.8                  |           | 1           |         | 115.6 Intersecting Ca veinlets, 30° and 11 c.a., 1/2 cm x 1cm.                                                                                | st-ka                  |                     |    |    |    |     | 4901  | <             |                    |  |  |  |     |
| 119            | 1.53                  | 1.41          | 92.2                  |           | 10          |         | 115.6-117.95 Intense st. pale green waxy. Broken and rubble. Cemented by calcite and cut by calcite stringers. Fault zone.                    | st-ka<br>Ca            |                     |    |    |    |     | 4902  | <             |                    |  |  |  |     |
| 120            | 1.53                  | 1.41          | 92.2                  |           | 10          |         | 117.95-122 Sericite-kaolinite alteration zone. Groundmass dark to pale green, dense, vfx waxy. 35% opaque white spots, 1-2mm. Kaolinized f.p? | st-ka                  |                     |    |    |    |     | 4903  | <             |                    |  |  |  |     |
| 121            | 1.51                  | 1.35          | 89.4                  |           | 5           |         | By dissem. 1%                                                                                                                                 | st-ka                  |                     |    |    |    |     | 4904  | <             |                    |  |  |  |     |
| 122            | 1.53                  | 1.53          | 100.0                 |           | 3           |         | 118.15-118.25 Gouge with fragments highly chloritized rock.                                                                                   | st-ka                  |                     |    |    |    |     | 4905  | <             |                    |  |  |  |     |
| 123            | 1.53                  | 1.53          | 100.0                 |           | 3           |         | 120.61 Cavity, 1cm at 40°                                                                                                                     | st-ka                  |                     |    |    |    |     | 4906  | <             |                    |  |  |  |     |
| 124            | 1.53                  | 1.53          | 100.0                 |           | 3           |         | 119.32-119.48 Fault gouge with dense black fragments chloritized rock.                                                                        | st-ka                  |                     |    |    |    |     | 4907  | <             |                    |  |  |  |     |



| DRILL INTERVAL | FROM | TO   | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                        | ALTERATION AND VEINING    | MINERAL PERCENTAGES |  |  |  |  | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |      |    | LAB |  |
|----------------|------|------|-----------------------|---------------|-----------------------|-----------|-----|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------|--|--|--|--|-------|---------------|--------------------|------|----|-----|--|
|                |      |      |                       |               |                       |           |     |         |                                                                                                                                                                                                                                                                                |                           | Py                  |  |  |  |  |       |               | FA                 | Au   | Ag |     |  |
| 124            |      |      |                       |               |                       |           |     |         | 124.60-125.00 Dense vfx sericite. Along lower contact, 3 cm massive chlorite. Irregular contacts.                                                                                                                                                                              | St St<br>chl chl          |                     |  |  |  |  | 125   | ✓             | 4902               | <    |    |     |  |
| 125            | 1.53 | 1.35 | 88.2                  |               |                       |           | 5   |         | 125.00-126.06 Sericite-calcite alteration. Dense, vfx grey sericite. Speckled with 10% mm spots white calcite concentrated in criss-crossing seams. Lower contact 20° upper irregular.                                                                                         | st-ca<br>ca               |                     |  |  |  |  | 126   | ✓             | 4903               | <    |    |     |  |
| 126            | 1.52 | 1.33 | 87.5                  |               |                       |           | 20  |         | 126.06-127 Brecciated andesite. Fractures filled with clay gouge. Gouge is calcitic.                                                                                                                                                                                           | st-ca<br>ca               |                     |  |  |  |  | 127   | ✓             | 4904               | <    |    |     |  |
| 127            | 1.53 | 1.28 | 83.7                  |               |                       |           | 15  |         | 127.0-128.71 As 125.00-126.06                                                                                                                                                                                                                                                  | st-ca<br>ca               |                     |  |  |  |  | 128   | ✓             | 4905               | <    |    |     |  |
| 128            | 1.52 | 1.43 | 94.1                  |               |                       |           | 10  |         | 127.40-127.45 Broken and rubble. 128.71-129.22 Andesite. Moderate st. Random Ca veinlets, 5%.                                                                                                                                                                                  | ca ca<br>st-ca            |                     |  |  |  |  | 129   | ✓             | 4906               | <    |    |     |  |
| 129            | 1.52 | 1.40 | 92.1                  |               |                       |           | 5   |         | 129.22-129.60 Pale green sericite rock. Dense, vfx, soft. 1% specks of black metallic (?). Cross-cut by random calcite veinlets.                                                                                                                                               | st-ca<br>35 st            |                     |  |  |  |  | 130   | ✓             | 4907               | <    |    |     |  |
| 130            | 1.53 | 1.30 | 85.0                  |               |                       |           | 30  |         | 129.60-130 Fault gouge. 130-130.80 Andesite. Locally brx. with gouge. Minor st & ca veinlets. 130.80-131 As 129.22-129.60                                                                                                                                                      | st                        |                     |  |  |  |  | 131   | ✓             | 4908               | <    |    |     |  |
| 131            | 1.03 | 0.90 | 87.4                  |               |                       |           | 20  |         | 131.00-136.36 Andesite. Fr-m; greenish grey. 15% hb microlites in greenish grey groundmass of quartz and saussuritized sp. Strongly fractured; fractures coated with green st. Locally brecciated, with fragments in a matrix of green sericite. 131.00-133.35 very broken up. | st                        |                     |  |  |  |  | 132   | ✓             | 4909               | <    |    |     |  |
| 132            | 1.22 | 0.98 | 80.3                  |               |                       |           | 20  |         | 136.16-136.36 Bleached pale brown. 136.36-137.09 Massive st. vfx, waxy, dense. Pale green to grey. Calcite veins at random orientations common. 1% black metallic flecks of (?)                                                                                                | 70 st<br>st st<br>chl chl |                     |  |  |  |  | 133   | ✓             | 4910               | 0.07 |    |     |  |
| 133            | 1.52 | 1.33 | 87.5                  |               |                       |           | 15  |         | 137.09-138.75 Andesite. Strongly fractured. Fractures coated with vfx serpentinite.                                                                                                                                                                                            | 50 chl<br>50 chl<br>45 st |                     |  |  |  |  | 134   | ✓             | 4911               | 0.07 |    |     |  |
| 134            |      |      |                       |               |                       |           |     |         | 137.95 Qtz vein, 2cm, 500                                                                                                                                                                                                                                                      |                           |                     |  |  |  |  | 135   | ✓             | 4912               | <    |    |     |  |

PROJECT YellowjacketHOLE DESIGNATION YJ-86-11LOGGED BY PAKSCALE 1 cm = 1 mPAGE 8 OF 17

| DRILL INTERVAL | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC    | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                     | ALTERATION AND VEINING  | MINERAL PERCENTAGES |    |    |    |     | DEPTH  | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  | LAB |
|----------------|-----------------------|---------------|-----------------------|-----------|-----|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------|----|----|----|-----|--------|---------------|--------------------|--|--|--|-----|
|                |                       |               |                       |           |     |            |                                                                                                                                                                                                                             |                         | FROM                | TO | FA | Au | gpt |        |               |                    |  |  |  |     |
| 139            | 139.29                |               |                       |           |     |            | 138.75-139.34 Intense sericite altn. Massive, pale waxy green with 1% dark metallic flecks of (?)                                                                                                                           | st <sup>+</sup> chl. ca |                     |    |    |    |     | 139.34 |               |                    |  |  |  |     |
| 140            | 1.53                  | 1.37          | 89.5                  |           | 4   | △ ▽ ▽      | 139.10-139.34 Mottled with 40% opaque white calcite.                                                                                                                                                                        | st-gt-ca                |                     |    |    |    |     | 139.34 | ✓             |                    |  |  |  |     |
| 141            | 140.82                |               |                       |           |     | △ ▽ ▽      | 139.34-141.55 Fault breccia. Fragments of andesite sericite rock, chlorite rock, ca veins and qtz veins in a greenish, calcitic clay gouge.                                                                                 | st-gt-ca                |                     |    |    |    |     | 141.55 | ✓             |                    |  |  |  |     |
| 142            | 1.52                  | 1.52          | 100                   |           | 10  | △ ▽ ▽      | Trace py.                                                                                                                                                                                                                   | st <sup>+</sup> chl. ca |                     |    |    |    |     | 141.55 | ✓             |                    |  |  |  |     |
| 143            | 142.34                |               |                       |           |     | △ ▽ ▽      | 141.55-142.4 Massive st. alteration. Mottled black with remnants of wall rock. Some quartz fragments. x-cut by tiny ca veinlets, stringers.                                                                                 | st <sup>+</sup> chl. ca |                     |    |    |    |     | 142.34 | ✓             |                    |  |  |  |     |
| 144            | 1.53                  | 1.35          | 88.2                  |           | 4   |            | 142.4-142.60 Fault brx. Frags. qtz and wallrock in greenish, calcitic clay gouge.                                                                                                                                           | st <sup>+</sup> chl. ca |                     |    |    |    |     | 142.34 | ✓             |                    |  |  |  |     |
| 145            | 143.87                |               |                       |           |     |            | 142.60-145.39 Intense st. altn. Pale creamy green, mottled with 35% dark splotches, probably remnants of andesite.                                                                                                          | st <sup>+</sup> chl. ca |                     |    |    |    |     | 143.87 | ✓             |                    |  |  |  |     |
| 146            | 1.52                  | 1.42          | 93.4                  |           | 2   |            | 143.9-144.15 Half of core taken up by angular zone (fragment? inclusion?) massive chlorite altn.                                                                                                                            | st <sup>+</sup> chl. ca |                     |    |    |    |     | 143.87 | ✓             |                    |  |  |  |     |
| 147            | 145.39                |               |                       |           |     |            | 145.39-146.1 Massive chlorite rock. Vfx, dense, dark green.                                                                                                                                                                 | st <sup>+</sup> chl. ca |                     |    |    |    |     | 145.39 | ✓             |                    |  |  |  |     |
| 148            | 1.52                  | 1.47          | 96.7                  |           | 8   |            | 146.1-151.1 Sericite. Massive, waxy green, vfx. 25% white calcite spots, mm. Variable 10%-30% dark spots (fragments) chlorite, ± 1cm. Locally, very large (±25cm) angular fragments massive chlorite. Few quartz fragments. | st <sup>+</sup> chl. ca |                     |    |    |    |     | 146.1  | ✓             |                    |  |  |  |     |
| 149            | 146.91                |               |                       |           |     |            | 146.5 Calcite-chlorite vein at 45°                                                                                                                                                                                          | st <sup>+</sup> chl. ca |                     |    |    |    |     | 146.91 | ✓             |                    |  |  |  |     |
| 150            | 1.53                  | 1.52          | 100                   |           | 2   |            | 146.75 calcite vein at 30°                                                                                                                                                                                                  | st <sup>+</sup> chl. ca |                     |    |    |    |     | 146.91 | ✓             |                    |  |  |  |     |
| 151            | 148.44                |               |                       |           |     |            | 147.3-147.46 Massive chl. with qtz veinlets.                                                                                                                                                                                | st <sup>+</sup> chl. ca |                     |    |    |    |     | 148.44 | ✓             |                    |  |  |  |     |
| 152            | 1.52                  | 1.50          | 98.7                  |           | 2   |            | 147.32-149.41 Massive chl. Angular frag.                                                                                                                                                                                    | st <sup>+</sup> chl. ca |                     |    |    |    |     | 148.44 | ✓             |                    |  |  |  |     |
| 153            | 149.96                |               |                       |           |     |            | 150 7cm long angular fragment.                                                                                                                                                                                              | st <sup>+</sup> chl. ca |                     |    |    |    |     | 149.96 | ✓             |                    |  |  |  |     |
| 154            | 1.53                  | 1.48          | 96.7                  |           | 3   | 1st rubble | 151-151.1 Broken rubble.                                                                                                                                                                                                    | st <sup>+</sup> chl. ca |                     |    |    |    |     | 149.96 | ✓             |                    |  |  |  |     |
| 155            | 151.49                |               |                       |           |     |            |                                                                                                                                                                                                                             | st <sup>+</sup> chl. ca |                     |    |    |    |     | 151.49 | ✓             |                    |  |  |  |     |
| 156            | 151.50                | 0.07          | 0.10                  | 142.9     |     |            |                                                                                                                                                                                                                             | st <sup>+</sup> chl. ca |                     |    |    |    |     | 151.50 | ✓             |                    |  |  |  |     |
| 157            | 1.43                  | 1.27          | 88.8                  |           | 20  |            |                                                                                                                                                                                                                             | st <sup>+</sup> chl. ca |                     |    |    |    |     | 151.50 | ✓             |                    |  |  |  |     |
| 158            | 152.01                |               |                       |           |     |            |                                                                                                                                                                                                                             | st <sup>+</sup> chl. ca |                     |    |    |    |     | 152.01 | ✓             |                    |  |  |  |     |
| 159            | 1.22                  | 1.16          | 95.1                  |           |     | rubble     |                                                                                                                                                                                                                             | st <sup>+</sup> chl. ca |                     |    |    |    |     | 152.01 | ✓             |                    |  |  |  |     |





| DRILL INTERVAL | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD    | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ALTERATION AND VEINING                               | MINERAL PERCENTAGES |    |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |     |  | LAB |
|----------------|-----------------------|---------------|-----------------------|-----------|--------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------|----|----|----|-----|-------|---------------|--------------------|----|-----|--|-----|
|                |                       |               |                       |           |        |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                      | Si                  | Al | Fe | Ca | Mg  |       |               | FA                 | Au | gpt |  |     |
| 154            | -154.23               |               |                       |           |        |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                      |                     |    |    |    |     |       |               |                    |    |     |  |     |
| 155            | 0.91                  | 0.79          | 86.8                  |           | rubble |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 155 |       |               |                    |    |     |  |     |
| 156            | 1.53                  | 1.31          | 85.6                  |           | rubble |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 156 | ✓     | 4924          | 0.10               |    |     |  |     |
| 157            | 1.52                  | 1.38          | 90.8                  |           | rubble |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 157 | ✓     | 4925          | <                  |    |     |  |     |
| 158            | 1.53                  | 1.28          | 83.7                  |           | rubble |         | 157.53-157.56 3 cm qtz vein, 60°<br>158 2cm qtz vein at 60°<br>158.44 1/2 cm ca vein, 45°<br>158.85 1cm ca vein, 45°<br>158.19-163.0 Andesitic fault rock? Mineralogically and texturally similar to previous interval but characteristically cont. up to 5% angular fragments grey qtz. 1-30mm; usually elongated. Fragmented qtz veins?<br>See 163.0-164.54 Completely altered. Mainly calcite. Mottled greenish grey groundmass. May be partly sericite. 5% dark chloritic fragments.<br>163.5 3 cm ca vein @ 20°<br>164.39 2 cm Ca vein @ 35° | 60 (st) st<br>60 (st) st<br>45 (st) st<br>45 (st) st |                     |    |    |    | 158 | ✓     | 4926          | 0.07               |    |     |  |     |
| 159            | 1.06                  | 0.86          | 81.1                  |           | 50     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 159 | ✓     | 4927          | <                  |    |     |  |     |
| 160            | 0.92                  | 0.96          | 104.3                 |           | 50     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 160 | ✓     | 4928          | 0.07               |    |     |  |     |
| 161            | 1.06                  | 0.86          | 81.1                  |           | 50     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 161 | ✓     | 4929          | <                  |    |     |  |     |
| 162            | 1.37                  | 1.13          | 82.5                  |           | 15     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st Ca<br>45 (st) st<br>35 (st) Ca<br>st st<br>st st  |                     |    |    |    | 162 | ✓     | 4930          | 0.07               |    |     |  |     |
| 163            | 1.53                  | 1.50          | 98.0                  |           | 30     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 163 | ✓     | 4931          | 0.14               |    |     |  |     |
| 164            | 1.52                  | 1.35          | 88.8                  |           | 40     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 164 | ✓     | 4932          | <                  |    |     |  |     |
| 165            | 1.53                  | 1.43          | 93.5                  |           | 15     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 165 | ✓     | 4933          | <                  |    |     |  |     |
| 166            |                       |               |                       |           |        |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 166 |       |               |                    |    |     |  |     |
| 167            |                       |               |                       |           |        |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 167 |       |               |                    |    |     |  |     |
| 168            |                       |               |                       |           |        |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 168 |       |               |                    |    |     |  |     |
| 169            |                       |               |                       |           |        |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | st                                                   |                     |    |    |    | 169 |       |               |                    |    |     |  |     |

diabase and andesite in clay gouge.

4932 - no sample but this number



| DRILL INTERVAL | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                        | ALTERATION and VEINING | MINERAL PERCENTAGES |  |  |  |  | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |      |    | LAB |
|----------------|-----------------------|---------------|-----------------------|-----------|-----|---------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--|--|--|--|-------|---------------|--------------------|------|----|-----|
|                |                       |               |                       |           |     |         |                                                                                                                                                |                        | Py                  |  |  |  |  |       |               | Au                 | Ag   | Cu |     |
| FROM           | TO                    |               |                       |           |     |         |                                                                                                                                                |                        |                     |  |  |  |  |       |               |                    |      |    |     |
| 184            | 184.9                 |               |                       |           |     |         | 184.34-184.71 Intense sericite alteration, with some quartz veining.                                                                           | st-qt                  | 1                   |  |  |  |  |       |               |                    |      |    |     |
| 185            | 1.53                  | 1.37          | 89.5                  |           |     |         | 184.71-186.99 Fault breccia. Fragments of andesite and quartz in clay gouge. Andesite grey, sericitized and/or silicified.                     | st-qt                  | 1                   |  |  |  |  |       |               |                    |      |    |     |
| 186            | 185.93                | 0.46          | 0.35                  | 76.1      |     |         | 186.99-187.40 Quartz-mariposite (vein?). 1% py; 1% chromite.                                                                                   | st-qt                  | 1                   |  |  |  |  |       | 4943          | 0.41               | 0.55 |    |     |
| 187            | 186.99                | 0.60          | 0.55                  | 91.7      |     |         | 187.40-190.08 Greyish andesite. 10% to 20% remnant hb in waxy grey groundmass. Hard; may be partly silicified. Trace py. Broken.               | qt-mp<br>10% tr        | tr                  |  |  |  |  |       | 4944          | 0.27               | 0.21 |    |     |
| 188            | 188.21                | 1.22          | 1.06                  | 86.9      |     | 30      | 187.77-187.84 On edge core, fragment qt-mp.                                                                                                    | qt-mp                  | tr                  |  |  |  |  |       | 4945          | <                  |      |    |     |
| 189            | 188.98                | 0.77          | 0.60                  | 77.9      |     | rubble  | 190.88-191.29 Silicified; mottled light-dark cut by white veins. Mariposite.                                                                   | st-si                  | tr                  |  |  |  |  |       | 189           |                    |      |    |     |
| 190            | 189.83                | 0.85          | 0.75                  | 88.2      |     | 22      | 191.29-191.55 Andesite.                                                                                                                        | st-si                  | tr                  |  |  |  |  |       | 4946          | <                  |      |    |     |
| 191            | 190.83                | 0.97          | 0.86                  | 88.7      |     | 50      | 191.35-191.65 Fault zone. Fragments of andesite and silicified rock in clay gouge.                                                             | st-si                  | tr                  |  |  |  |  |       | 190.88        |                    |      |    |     |
| 192            | 190.80                | 0.16          | 0.11                  | 68.8      |     | rubble  | 191.65-192.20 Massive qt-st. Mottled with dark green chloritized wall rock. 1% opaque black metallic flecks of (?). Fragments of quartz veins. | st-st<br>30            | tr                  |  |  |  |  |       | 4947          | 0.17               |      |    |     |
| 193            | 192.18                | 1.22          | 1.05                  | 86.1      |     | 14      | 192.20-193.10 - Andesite. Broken and fractured.                                                                                                | qt-st                  | tr                  |  |  |  |  |       | 193.1         | 4948               | <    |    |     |
| 194            | 193.40                | 1.52          | 1.40                  | 92.10     |     | 12      | 193.10-193.59 Massive qtz-st-calcite alteration. Mariposite at lower contact.                                                                  | ca-chl.                |                     |  |  |  |  |       | 193.57        | 4949               | <    |    |     |
| 195            | 194.92                | 1.52          | 1.45                  | 95.4      |     | 10      | 193.59-206.86 Andesite. Weak st altn. Calcite and chlorite on fractures.                                                                       | ca-chl.                |                     |  |  |  |  |       | 195           |                    |      |    |     |
| 196            | 196.44                | 1.53          | 1.49                  | 97.4      |     | 5       | 196.3-196.55 qtz vein. Black chl. fragments.                                                                                                   | ca-chl.                |                     |  |  |  |  |       | 4950          | <                  |      |    |     |
| 197            | 197.97                | 1.67          | 1.48                  | 88.6      |     | 8       | 196.55-197.17 Altered to mottled green and brown, vfx rock. Composition unknown.                                                               | qt-st<br>35            |                     |  |  |  |  |       | 197           |                    |      |    |     |
| 198            |                       |               |                       |           |     |         | 196.86 - Angular bleb of green sericite, 3cm x 6 cm. Pale green, waxy.                                                                         | st (s)                 |                     |  |  |  |  |       | 4951          | <                  |      |    |     |
| 199            |                       |               |                       |           |     |         | 197.17-197.22 Pale green sericite vein, 5 cm., 40° Angular dark green blebs (chlorite?)                                                        | st (s)                 |                     |  |  |  |  |       | 199           |                    |      |    |     |













| DRILL INTERVAL | RECOVERED LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                            | ALTERATION and VEINING | MINERAL PERCENTAGES |  |  |  |  | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |        |               | LAB |
|----------------|------------------|---------------|-----------------------|-----------|-----|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--|--|--|--|-------|---------------|--------------------|--------|---------------|-----|
|                |                  |               |                       |           |     |         |                                                                                                                                                                    |                        |                     |  |  |  |  |       |               |                    | Au gpt | Au screen FAA |     |
| 259            | 259.69           |               |                       |           |     |         | 261.65-261.79 Talcose Sault gouge.                                                                                                                                 | Sp                     |                     |  |  |  |  |       |               |                    |        |               |     |
| 260            | 1.37             | 1.15          | 83.9                  |           | 20  |         | 262.22-262.44 Fault gouge.                                                                                                                                         | Sp tr                  |                     |  |  |  |  | 4996  | <             |                    |        |               |     |
| 261            | 261.06           |               |                       |           |     |         |                                                                                                                                                                    | Sp                     |                     |  |  |  |  |       |               |                    |        |               |     |
| 262            | 1.22             | 1.07          | 87.7                  | ~~~~      | 30  |         |                                                                                                                                                                    | Fe                     | tr                  |  |  |  |  | 4997  | .07           | .407               |        |               |     |
| 263            | 262.28           |               |                       | ~~~~      |     |         |                                                                                                                                                                    | Fe                     | tr                  |  |  |  |  |       |               |                    |        |               |     |
| 264            | 1.52             | 1.34          | 88.2                  |           | 25  |         |                                                                                                                                                                    | tc-ca                  |                     |  |  |  |  | 4998  | 0.55          | .407               |        |               |     |
| 265            | 263.80           |               |                       |           |     |         |                                                                                                                                                                    |                        | tr                  |  |  |  |  |       |               |                    |        |               |     |
| 266            | 1.07             | 0.85          | 79.4                  | ~~~~      | 30  |         |                                                                                                                                                                    | tc-ca                  |                     |  |  |  |  | 4999  | 0.14          | 0.07               |        |               |     |
| 267            | 264.87           |               |                       |           | 20  |         |                                                                                                                                                                    |                        | tr                  |  |  |  |  |       |               |                    |        |               |     |
| 268            | 1.53             | 1.47          | 96.1                  |           |     |         |                                                                                                                                                                    | tc-ca                  |                     |  |  |  |  |       |               |                    |        |               |     |
| 269            | 266.40           |               |                       |           |     |         | 267-275.84 Almost completely serpentinized pyroxenite. talc and/or carbonate veinlets very common. Rock much less broken than most in this hole. R <sub>1</sub> 1% | tc-ca                  | 1                   |  |  |  |  | 5000  | <             |                    |        |               |     |
| 270            | 1.06             | 0.99          | 93.4                  |           |     |         |                                                                                                                                                                    | tc-ca                  |                     |  |  |  |  |       |               |                    |        |               |     |
| 271            | 267.46           |               |                       |           |     |         |                                                                                                                                                                    |                        | 1                   |  |  |  |  |       |               |                    |        |               |     |
| 272            | 1.37             | 1.30          | 94.9                  |           |     |         |                                                                                                                                                                    | tc-ca                  |                     |  |  |  |  | 23    |               |                    |        |               |     |
| 273            | 268.83           |               |                       |           |     |         |                                                                                                                                                                    |                        | 1                   |  |  |  |  | 501   | 0.10          |                    |        |               |     |
| 274            | 1.53             | 1.43          | 93.5                  |           |     |         |                                                                                                                                                                    |                        |                     |  |  |  |  |       |               |                    |        |               |     |
| 275            | 270.36           |               |                       |           |     |         |                                                                                                                                                                    |                        | 1                   |  |  |  |  |       |               |                    |        |               |     |
| 276            | 1.52             | 1.42          | 93.4                  |           |     |         |                                                                                                                                                                    | tc-ca                  | 1                   |  |  |  |  | 23    |               |                    |        |               |     |
| 277            | 271.88           |               |                       |           |     |         |                                                                                                                                                                    |                        |                     |  |  |  |  | 502   | <             |                    |        |               |     |
| 278            | 1.53             | 1.48          | 96.7                  |           |     |         |                                                                                                                                                                    |                        | 1                   |  |  |  |  |       |               |                    |        |               |     |
| 279            | 273.41           |               |                       |           |     |         |                                                                                                                                                                    |                        |                     |  |  |  |  |       |               |                    |        |               |     |
| 280            | 0.61             | 0.48          | 78.7                  |           |     |         |                                                                                                                                                                    | tc-ca                  | 1                   |  |  |  |  | 23    |               |                    |        |               |     |
|                |                  |               |                       |           |     |         |                                                                                                                                                                    |                        |                     |  |  |  |  | 503   | <             |                    |        |               |     |



DIAMOND DRILL HOLE

YJ 86-12





















PROJECT Yellow JacketHOLE DESIGNATION YS 86-12LOGGED BY MWHSCALE 1cm = 1mPAGE 6 OF 10

| DRILL INTERVAL | FROM   | TO     | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | fr/m | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                       | ALTERATION and VEINING | MINERAL PERCENTAGES |    |     |           |        | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |     |    |    | LAB |
|----------------|--------|--------|-----------------------|---------------|-----------------------|-----------|------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|-----|-----------|--------|-------|---------------|--------------------|-----|----|----|-----|
|                |        |        |                       |               |                       |           |      |         |                                                                                                                                                                                                               |                        | Py                  | QZ | St  | Tc        | Cls    |       |               | Au                 | g/t |    |    |     |
| 92             | 92.05  |        |                       |               |                       |           |      |         | 91.66-93.97 cont'd ; Tr 0.25% sig Py and equal amount v.fg black metallic which is usually v. weakly magnetic - conspicuous cream spots locally 15% up to 3mm, spots seem to be Mg altered fsp? cont'd on b.1 | Py<br>chl<br>mg        | Tr to 0.25          |    |     | weak Wood | 8      |       |               |                    |     |    | 92 |     |
| 93             | 1.52   | 1.49   | 98                    |               |                       |           | 20   |         |                                                                                                                                                                                                               |                        |                     |    |     |           |        |       |               |                    |     | 93 |    |     |
| 94             | 93.57  |        |                       |               |                       |           |      |         | 93.97-98.17 Bleached ALTERED serpentinite? greyish; seems to be pervasive TC altn with minor diss Mg ± chl ± St - tr v.fg diss Py; tr v.fg black metallic which can be weakly magnetic                        | St mg                  | Tr                  |    | mod | str       | 4      | 93.97 |               |                    |     | 94 |    |     |
| 95             | 95.10  |        |                       |               |                       |           |      |         | 94.9 patch of dk grey slur chloritic unit; 10cm wide                                                                                                                                                          | St mg                  |                     |    |     |           |        | 23290 |               |                    |     | 95 |    |     |
| 96             | 1.52   | 1.20   | 79                    |               |                       |           | 11   |         | 96.4 20cm wide bul of strong to centered on talcose, mg fractures; few QZ frags - cont'd on b.1                                                                                                               | St mg<br>tr<br>mg      | tr                  |    |     |           | 96.0   |       |               |                    | 96  |    |    |     |
| 97             | 96.62  |        |                       |               |                       |           |      |         |                                                                                                                                                                                                               | tr<br>St mg            |                     |    |     |           | 23289  | 0.24  |               |                    | 97  |    |    |     |
| 98             | 98.15  |        |                       |               |                       |           |      |         | 98.17-106.68                                                                                                                                                                                                  | TC                     | 0.25                |    |     |           |        | 98.17 |               |                    |     | 98 |    |     |
| 99             | 1.37   | 0.90   | 66                    |               |                       |           | 10   |         | - f.g green volc/mtz;<br>- weak to mod. magnetic except @ CTC zones;                                                                                                                                          |                        |                     |    |     |           | 23288  |       |               |                    | 99  |    |    |     |
| 100            | 99.52  |        |                       |               |                       |           |      |         | 98.17-98.35 and 105.46-106.68                                                                                                                                                                                 | cu<br>chl<br>cu        |                     |    |     |           | 100.0  |       |               |                    | 100 |    |    |     |
| 101            | 100.74 | 101.19 | 0.45                  | 0.45          | 100                   |           | 10   |         | - 0.25% f.g diss Py<br>- relatively fresh looking and massive; locally heavily fracture or faulted                                                                                                            | ms, st, chl, tr        |                     |    |     |           | 23237  |       |               |                    | 101 |    |    |     |
| 102            | 1.07   | 1.00   | 93                    |               |                       |           |      |         | - pervasive carbonate, probably Ca, diss. altn with some veinlets coating fracturing surfaces; between 99.7-105.05                                                                                            | cu                     |                     |    |     |           | 102.0  |       |               |                    | 102 |    |    |     |
| 103            | 1.52   | 1.48   | 97                    |               |                       |           | 25   |         | - chl altn weak but mil in heavily fracture zones                                                                                                                                                             | ms                     |                     |    |     |           | 23236  |       |               |                    | 103 |    |    |     |
| 104            | 103.78 |        |                       |               |                       |           |      |         | - upper CTC sharp @ 30°; talcose over 5mm<br>- lower CTC FAULTED                                                                                                                                              |                        |                     |    |     |           | 104.0  |       |               |                    | 104 |    |    |     |
| 105            | 1.38   | 1.20   | 87                    |               |                       |           | 25   |         | - CTC zones are v.f.g with dk green mafic spots < 1mm<br>- mafic minerals total 5% included Bi and? and some fine lute < 2mm long                                                                             | cu                     |                     |    |     |           | 23235  |       |               |                    | 105 |    |    |     |
| 106            | 105.16 | 105.46 | 0.30                  | 0.26          | 87                    |           |      |         | 106.68-101.19 altered serpentinite bleached contacts; tr black metallic cont'd on b.1                                                                                                                         |                        |                     |    |     |           | 106.68 |       |               |                    | 106 |    |    |     |
| 107            | 1.52   | 1.52   | 100                   |               |                       |           | 10   |         | 106.68-119.49 ALTERED SERPENTINITE?                                                                                                                                                                           |                        |                     |    |     |           | 23234  |       |               |                    | 107 |    |    |     |















PROJECT YELLOW SACKETHOLE DESIGNATION YS 86-12LOGGED BY MW4SCALE 1cm = 1mPAGE 10.1 OF 10

| DRILL INTERVAL |    | RECOVERED<br>CORE<br>LENGTH | CORE<br>RECOVERY | FOLIATION<br>OR<br>CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE<br>(DESCRIPTION)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ALTERATION<br>and<br>VENING | MINERAL PERCENTAGES |  |  |  |  | DEPTH | SAMPLE<br>NUMBER | ASSAY GEOCHEMISTRY |  |  |  | LAB |  |
|----------------|----|-----------------------------|------------------|-----------------------------|-----------|-----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--|--|--|--|-------|------------------|--------------------|--|--|--|-----|--|
| FROM           | TO |                             |                  |                             |           |     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                             |                     |  |  |  |  |       |                  |                    |  |  |  |     |  |
|                |    |                             |                  |                             |           |     |         | <p>151.45 - 152.73</p> <ul style="list-style-type: none"> <li>- weakly brecciated with gouge material in fractures which are chl coated</li> <li>- Intrusive? has weak granular texture upper etc is chilled over 5cm</li> <li>- Ca veinlets and weakly cliss.</li> <li>- chl can be found as dk green spots &lt; 1mm altered mafics? ; this type of chl totals ~ 5%; look like spots "porphyritic"</li> <li>- lower etc @ 45° sharp</li> <li>- at lower etc is a wedge of clean pale green silicified ls H &gt; 6</li> </ul> <p>152.73 - 153.68 cont'd</p> <ul style="list-style-type: none"> <li>Altn: Qtz/cr veins, cliss Ca silicified pale green clean wisps, tc, chl on fracture surfaces</li> <li>- tr. fr. black metallics which can be weakly magnetic usually ass. c tc</li> <li>- tr. vfg cliss py; tr. vfg vltls in silicified zone</li> <li>- lower etc brecciated</li> </ul> <p>158.82 - 160.63 cont'd</p> <ul style="list-style-type: none"> <li>- tr. py occurring as euhedral cubes up to 3mm</li> <li>- cliss Ca altn minor</li> <li>- some dk green chl frags &lt; 1mm</li> </ul> <p>below 160.63 coming from 115.82 - 134.11 consisting of green gouge and frags of intermediate to mafic volc; totals 1m</p> |                             |                     |  |  |  |  |       |                  |                    |  |  |  |     |  |

DIAMOND DRILL HOLE

YJ 86-13











| DRILL INTERVAL | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                 | ALTERATION and VENEING | MINERAL PERCENTAGES |    |    |   |        | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |    |    | LAB |    |    |
|----------------|-----------------------|---------------|-----------------------|-----------|-----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|----|---|--------|-------|---------------|--------------------|----|----|----|-----|----|----|
|                |                       |               |                       |           |     |         |                                                                                                                                                                                                                                         |                        | Py                  | Mt | Qz | K | Others |       |               | FA                 | Au | Ag | PT |     |    |    |
| 65             |                       |               |                       |           |     |         | 62.5-68.95 Serpentinite; blue dusty grey; upper 50cm brecciated, slightly bleached; hairline fractures ± white carb(?) coating; gradually becomes more blue grey down hole; fractures polished serpentine, slickenside have pitch of 0° | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     | 65 |    |
| 66             | 66.14                 |               |                       |           |     |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     |    | 66 |
| 67             | 1.53                  | 1.50          |                       |           | 12  |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     |    | 67 |
| 68             | 67.67                 | 1.52          | 1.52                  |           | 11  |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   | 69.00  |       |               |                    |    |    |    |     |    | 68 |
| 69             | 69.19                 | 1.52          | 1.52                  |           | 5   |         | 68.95-75.90 Serpentinite; dk green to dk blue grey; massive ± slightly darker spots to S and S'W; hairline fractures of either green polished serpentine or white carb(?) coatings                                                      | /                      |                     |    |    |   |        | 25807 | <             |                    |    |    |    |     |    | 69 |
| 70             | 70.71                 | 1.53          | 1.50                  |           | 5   |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   | 71.00  |       |               |                    |    |    |    |     |    | 70 |
| 71             | 72.24                 | 1.52          | 1.34                  |           | 12  |         | 70.6 Staked fresh surface ± serpentine and slightly talcose                                                                                                                                                                             | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     |    | 71 |
| 72             | 73.76                 | 1.53          | 1.37                  |           | 16  |         | 71.82-75.08 fractures coated ± orange stained carb(?) locally highly fractured. see 72.24-72.9; 74.0-74.5;                                                                                                                              | /                      |                     |    |    |   |        | 74.0  |               |                    |    |    |    |     |    | 72 |
| 73             | 75.24                 | 1.52          | 1.52                  | 100       | 5   |         | 75.12-75.30 DIKE; pale green am to rhy, H <sub>2</sub> O <sup>1/2</sup> altered?; non carb.; 0.5% v. v. mt.                                                                                                                             | /                      |                     |    |    |   |        | 25800 | <             |                    |    |    |    |     |    | 73 |
| 74             | 78.58                 | 1.52          | 1.52                  | 100       | 6   |         | CTCS ~ 40°; immediately up to dike host rk strong carb(?) ultra over 3cm to 10% host is non magnetic within 10-20cm of dike CTCS; -lower etc may have some assimilation of host                                                         | /                      |                     |    |    |   |        | 76.0  |               |                    |    |    |    |     |    | 74 |
| 75             | 79.86                 | 1.53          |                       |           | 7   |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     |    | 75 |
| 76             |                       |               |                       |           |     |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     |    | 76 |
| 77             |                       |               |                       |           |     |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     |    | 77 |
| 78             |                       |               |                       |           |     |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     |    | 78 |
| 79             |                       |               |                       |           |     |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     |    | 79 |
| 80             |                       |               |                       |           |     |         |                                                                                                                                                                                                                                         | /                      |                     |    |    |   |        |       |               |                    |    |    |    |     |    | 80 |

continue S.1

PROJECT Yellow JacketHOLE DESIGNATION YJ86-13LOGGED BY MWHSCALE 1cm = 1mPAGE 5.1 OF     

| DRILL INTERVAL |    | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ALTERATION and VEINING | MINERAL PERCENTAGES |  |  |  | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  | LAB |  |  |  |
|----------------|----|-----------------------|---------------|-----------------------|-----------|-----|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--|--|--|-------|---------------|--------------------|--|--|--|-----|--|--|--|
| FROM           | TO |                       |               |                       |           |     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |                     |  |  |  |       |               |                    |  |  |  |     |  |  |  |
|                |    |                       |               |                       |           |     |         | 75.70-75.85 zone of white carb(t) vult @ 70-80° total 10%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |                     |  |  |  |       |               |                    |  |  |  |     |  |  |  |
|                |    |                       |               |                       |           |     |         | 75.83-83.85 (and beyond)<br>serpentine; blue grey massive hairline fractures & white carb(t) coatings/vults<br>76.20-77.0 some orange staining carb(t)<br>- occ. orange stained on fracture surface throughout.<br>- below 83.10 unit slightly mottled and paler blue grey, and orange staining on fractures<br>76.27 1cm white carb(t) vult @ 70°<br>76.61 9cm vein of white and orange stained carb(t)<br>77.52 3mm white grey carb(t) vult @ 50°<br>78.30 3cm white carb(t) vein, irregular<br>78.61 3mm carb(t) @ 80°<br>80.53 2cm yellow-orange carb(t) vein @ 30°<br>82.11 15mm white carb(t) vein @ 25° ± two layers of pale green talc which are 2mm wide |                        |                     |  |  |  |       |               |                    |  |  |  |     |  |  |  |







PROJECT Yellowjacket HOLE DESIGNATION YJ-816-13 LOGGED BY P.A.R. SCALE 1cm = 1m PAGE 7 OF 11

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| DRILL INTERVAL | RECOVERED LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                  | ALTERATION and VEINING | MINERAL PERCENTAGES |    |                 |    |        | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |     |  |  | LAB |      |
|----------------|------------------|---------------|-----------------------|-----------|-----|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|-----------------|----|--------|-------|---------------|--------------------|-----|--|--|-----|------|
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          |                        | Ry                  | Mt | Qt              | Tc | Cbt    |       |               | A4                 | got |  |  |     |      |
| 94.91          | 1.34             | 1.13          | 84.3                  |           | 9   |         | 94.07-95.17 Unknown alteration. VFY, beige, very weak reaction with HCl. Ry 5%, very fine; concentrated along fractures, with minor qt. Maybe cbt.                                                                                       | cbt <sup>+</sup> (qt)  | 5                   |    | 5               |    | 20     | 94.07 | 23            |                    |     |  |  |     |      |
|                |                  |               |                       |           | 11  |         | 94.65-94.91 Less altered serpentinite. Minor white qt veinlet, no py. Hem coals fract.                                                                                                                                                   | cbt' (qt)              |                     |    |                 |    | 70     | 95.17 | 23            |                    |     |  |  |     |      |
|                | 1.56             | 1.20          | 76.9                  |           |     |         |                                                                                                                                                                                                                                          | sil <sup>+</sup>       | tr                  |    | 90              |    | 96     | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | sil <sup>+</sup>       | 1                   |    | 95 <sup>+</sup> |    |        | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | sil <sup>+</sup>       |                     |    |                 |    |        | 287   |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          |                        |                     |    |                 |    |        | 23    |               |                    |     |  |  |     |      |
|                | 1.38             | 1.26          | 91.3                  |           | 10  |         | 95.17-95.47 Intense silicification. Silicified groundmass with 5% mp. 3 generations x-cutting qt. veins. Ry trace.                                                                                                                       | qt-mp                  | tr                  |    | 95 <sup>+</sup> |    |        | 97.28 | 23            |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | qt-mp                  | tr                  |    |                 |    |        | 288   |               |                    |     |  |  |     | 0.27 |
|                | 1.52             | 1.51          | 99.3                  |           | 2   |         | 95.47-97.28 Intense silicification; only 1 generation, pervasive. Greyish brown. 5% pale flecks of (?) Ry 1%, dissem.                                                                                                                    | cbt                    | nil                 |    | 10              |    | 85     | 98.31 | 23            |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | cbt                    |                     |    |                 |    |        | 289   |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | qt-mp                  |                     |    |                 |    |        | 23    |               |                    |     |  |  |     |      |
|                | 1.52             | 1.44          | 94.7                  |           | 6   |         | 97.28-98.31 Qt-mp altn. Groundmass white qt, speckled with 1% chromite? 2% mp. Locally, frags. white qt.                                                                                                                                 | qt-mp                  |                     |    | 65              |    | 100.50 | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | qt-mp                  |                     |    |                 |    |        | 290   |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | qt-mp                  |                     |    |                 |    |        | 23    |               |                    |     |  |  |     |      |
|                | 1.53             | 1.48          | 96.7                  |           | 10  |         | 98.31-99.40 Cbt-qt 3 mp altn. White cbt. groundmass; 1% specks (chromite?). Qt veins locally.                                                                                                                                            | st                     | 3                   |    |                 |    | 101.58 | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | st                     |                     |    |                 |    |        | 292   |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | st                     |                     |    |                 |    |        | 23    |               |                    |     |  |  |     |      |
|                | 1.52             | 1.34          | 88.2                  |           | 11  |         | 99.40-101.58 Highly silicified. Qt-mp altn. Opaque white groundmass mottled with 30% green mp. Locally, grey st instead of mp. Cross-cutting qt veinlets, 2 generations. 1% black (chromite?).                                           | qt                     | tr                  |    |                 |    | 103    | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | qt                     |                     |    |                 |    |        | 293   |               |                    |     |  |  |     | 0.07 |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | qt                     |                     |    |                 |    |        | 23    |               |                    |     |  |  |     |      |
|                | 1.53             | 1.44          | 94.1                  |           | 10  |         | 101.19-101.58 Ry 1%. 101.42 Qt. vein, 1cm, 25°                                                                                                                                                                                           | st                     |                     |    |                 |    | 104    | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | st                     |                     |    |                 |    |        | 294   |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | st                     |                     |    |                 |    |        | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | st                     |                     |    |                 |    |        | 295   |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | st                     |                     |    |                 |    |        | 23    |               |                    |     |  |  |     |      |
|                | 1.52             | 1.38          | 90.8                  |           | 12  |         | 101.50-104.74 Dike. Syenite or a more mafic equivalent? Greenish beige. 5% sub-mm hb. Groundmass 40% pale microlites of feldspar (?) in a pale waxy groundmass. No obvious quartz in wall rock. Quartz veins common. Variable py dissem. | qt                     | 1                   |    | 100             |    | 105.65 | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | qt                     |                     |    |                 |    |        | 296   |               |                    |     |  |  |     | 0.10 |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | qt                     |                     |    |                 |    |        | 23    |               |                    |     |  |  |     |      |
|                | 1.22             | 0.96          | 78.7                  |           | 20  |         | 102.18 Qt-st veinlet, 2 mm, 15°                                                                                                                                                                                                          | st                     | 1                   |    | 100             |    | 106.54 | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | st                     |                     |    |                 |    |        | 297   |               |                    |     |  |  |     | 0.45 |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | st                     |                     |    |                 |    |        | 23    |               |                    |     |  |  |     |      |
|                |                  |               |                       |           |     |         |                                                                                                                                                                                                                                          | st                     |                     |    |                 |    |        | 298   |               |                    |     |  |  |     |      |







PROJECT Yellowjacket HOLE DESIGNATION YJ-86-13 LOGGED BY PAR SCALE 1cm = 1m PAGE 9 OF 11

| DRILL INTERVAL | RECOVERED LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                      | ALTERATION and VEINING                | MINERAL PERCENTAGES |    |    |    |     | DEPTH  | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  | LAB |  |  |
|----------------|------------------|---------------|-----------------------|-----------|-----|---------|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------|----|----|----|-----|--------|---------------|--------------------|--|--|--|-----|--|--|
|                |                  |               |                       |           |     |         |                                                                                                                                              |                                       | Ry                  | Mt | Qt | Tc | Cbt |        |               | Au gpt             |  |  |  |     |  |  |
| 122<br>-122.53 |                  |               |                       |           |     |         | 123.2-123.4 highly silicified; 2 generations qt veinlets.                                                                                    | 55% <sup>qt</sup> / 45% <sup>st</sup> |                     |    |    | 10 | 60  | 123    | 23            |                    |  |  |  |     |  |  |
| 123<br>1.52    | 1.56             | 100           |                       |           | 4   |         | 125.5-126.2 Grey altered serpentinite. Soft, very weakly reactive. Ry nil. qt. nil. Tab & brucite & calc.                                    | 45% <sup>qt</sup> / 55% <sup>st</sup> |                     |    | 10 |    | 123 | 23     | 311           | <                  |  |  |  |     |  |  |
| 124<br>-124.05 |                  |               |                       |           |     |         | 126.2-126.65 As 125.5-126.2, but pale green.                                                                                                 |                                       |                     |    |    |    | 60  | 124    | 23            |                    |  |  |  |     |  |  |
| 125<br>1.53    | 1.46             | 95.4          |                       |           | 4   |         | 126.65-127.10 Dark green serpentinite. Calcite veinlets.                                                                                     | 70% <sup>qt</sup> / 30% <sup>st</sup> |                     |    |    |    |     | 125    | 23            |                    |  |  |  |     |  |  |
| 126<br>-125.78 |                  |               |                       |           |     |         | 126.83 Ca vein, 2mm, 80°                                                                                                                     |                                       |                     |    |    | 5  | 20  | 125.5  | 23            |                    |  |  |  |     |  |  |
| 126<br>1.52    | 1.48             | 97.4          |                       |           | 5   |         | 127.10 Qt vein, 7 cm.                                                                                                                        | nil                                   |                     |    |    |    |     | 126.65 | 23            |                    |  |  |  |     |  |  |
| 127<br>-127.10 |                  |               |                       |           |     |         | 127.17-127.83 Fault zone. Fragments of soft, brownish talcose serpentinite in greenish clay gouge.                                           | 30% <sup>cm</sup> / 70% <sup>st</sup> |                     |    |    |    |     | 127.10 | 23            |                    |  |  |  |     |  |  |
| 128<br>1.53    | 1.34             | 87.6          |                       |           | 20  |         | 127.83-128.20 Intense st alteration. Greenish white rock mottled with 5% dark grey spots of relict mafic minerals. Trace cbt.                | 5% <sup>st</sup> / 95% <sup>st</sup>  |                     |    |    |    | 20  | 127    | 23            |                    |  |  |  |     |  |  |
| 129<br>-128.63 |                  |               |                       |           |     |         | 128.20-136.25 Dark green serpentinite. Variably mottled paler green. Criss-crossed with talc veinlets. Rare qt and/or cbt. veinlets, ≤ 2 mm. |                                       |                     |    |    |    |     | 129    | 23            |                    |  |  |  |     |  |  |
| 130<br>1.52    | 1.43             | 94.1          |                       |           | 7   |         | 128.20-129.74 Paler green serpentinite.                                                                                                      |                                       |                     |    | 5  |    |     | 130    | 23            |                    |  |  |  |     |  |  |
| 131<br>-131.67 |                  |               |                       |           |     |         | 131.36-131.77 Network 1-2 mm qt veinlets w. mt.                                                                                              | qt-mt                                 |                     |    |    |    |     | 131    | 23            |                    |  |  |  |     |  |  |
| 132<br>1.53    | 1.49             | 97.4          |                       |           | 3   |         | 133.20-133.30 Bleached paler green.                                                                                                          | qt-mt                                 |                     |    |    |    |     | 132    | 23            |                    |  |  |  |     |  |  |
| 133<br>-133.20 |                  |               |                       |           |     |         |                                                                                                                                              |                                       |                     |    |    |    |     | 133    | 23            |                    |  |  |  |     |  |  |
| 134<br>1.52    | 1.41             | 92.8          |                       |           | 4   |         |                                                                                                                                              |                                       |                     |    |    |    |     | 134    | 23            |                    |  |  |  |     |  |  |
| 135<br>-134.72 |                  |               |                       |           |     |         |                                                                                                                                              |                                       |                     |    |    |    |     | 135    | 23            |                    |  |  |  |     |  |  |
| 136<br>1.53    | 1.54             | 100.1         |                       |           | 7   |         |                                                                                                                                              |                                       |                     |    | 5  |    |     | 136    | 320           | <                  |  |  |  |     |  |  |

PROJECT YellowjacketHOLE DESIGNATION YJ-86-13LOGGED BY PARSCALE 1 cm = 1 mPAGE 10 OF 11

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| DRILL INTERVAL | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                           | ALTERATION and VEINING | MINERAL PERCENTAGES |                |    |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |     |  |  | LAB |  |
|----------------|-----------------------|---------------|-----------------------|-----------|-----|---------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----------------|----|----|----|-----|-------|---------------|--------------------|-----|--|--|-----|--|
|                |                       |               |                       |           |     |         |                                                                                                                                   |                        | P <sub>y</sub>      | M <sub>g</sub> | Qt | Tc | Cr | FA  |       |               | Au                 | gpt |  |  |     |  |
| 136            | -136.25               |               |                       |           |     |         | 136.25-144.38 Serpentinized gabbro.                                                                                               |                        |                     |                |    |    |    |     |       |               |                    |     |  |  |     |  |
| 137            | 1.52                  | 1.51          | 99.3                  |           | A   | Y       | 40% pyx in Sp groundmass. Fp <sub>122</sub> saussititized; pyx variably serpentinized. Mt. 2%.                                    | 20/30                  |                     |                | 2  |    |    | 137 |       |               |                    |     |  |  |     |  |
| 138            | -137.77               |               |                       |           |     | X       | 136.80-136.90 Cross-crossing qt veins to 1cm wide. Veins cont. 10% mt, as hairline segregations. Wallrock strongly serpentinized. | 25/30                  |                     |                |    | 3  |    |     | 23    |               |                    |     |  |  |     |  |
| 139            | 1.52                  | 1.60          | 105.3                 |           | 9   | Y       |                                                                                                                                   | 25/30                  |                     |                | 2  |    |    | 139 |       |               |                    |     |  |  |     |  |
| 140            | -139.29               |               |                       |           |     | Y       | 138.20 Vuggy qt vein, 5mm, 30°                                                                                                    |                        |                     |                |    |    |    |     | 23    |               |                    |     |  |  |     |  |
| 140            | 1.53                  | 1.44          | 94.1                  |           | 7   | Y       | 140.58 Qt-vein very lcn, 60°                                                                                                      |                        |                     |                |    | 3  |    |     | 322   |               |                    |     |  |  |     |  |
| 141            | -140.82               |               |                       |           |     | Y       | 144.38-155.1 Serpentinized ultramafic.                                                                                            | 10/30                  |                     |                |    |    |    |     |       |               |                    |     |  |  |     |  |
| 142            | 1.52                  | 1.48          | 97.4                  |           | 8   | Y       | 145.80-146.16 2 qt veinlets at 20° qt. crackle zone. P <sub>y</sub> 1%                                                            |                        |                     |                | 2  |    |    | 141 | 23    |               |                    |     |  |  |     |  |
| 143            | -142.34               |               |                       |           |     | Y       | 146.63 1cm qt-st vein at 20°                                                                                                      |                        |                     |                |    | 3  |    |     | 323   |               |                    |     |  |  |     |  |
| 143            | 1.53                  | 1.46          | 95.4                  |           | 3   | Y       |                                                                                                                                   |                        |                     |                |    |    |    | 143 |       |               |                    |     |  |  |     |  |
| 144            | -143.87               |               |                       |           |     | X       |                                                                                                                                   |                        |                     |                |    |    |    |     | 23    |               |                    |     |  |  |     |  |
| 145            | 1.52                  | 1.50          | 98.7                  |           | 15  |         |                                                                                                                                   |                        |                     |                |    | 1  |    | 145 |       |               |                    |     |  |  |     |  |
| 146            | -145.39               |               |                       |           |     |         |                                                                                                                                   |                        |                     |                |    |    |    |     | 23    |               |                    |     |  |  |     |  |
| 146            | 1.52                  | 1.43          | 94.1                  |           | 6   |         |                                                                                                                                   | 30/30                  |                     |                | 1  |    |    | 325 |       |               |                    |     |  |  |     |  |
| 147            | -146.91               |               |                       |           |     |         |                                                                                                                                   | 20/30                  |                     |                |    |    |    |     |       |               |                    |     |  |  |     |  |
| 147            | 1.53                  | 1.50          | 98.0                  |           | 10  |         |                                                                                                                                   |                        |                     |                |    |    |    | 147 | 23    |               |                    |     |  |  |     |  |
| 148            | -148.44               |               |                       |           |     |         |                                                                                                                                   |                        |                     |                |    |    |    |     | 326   |               |                    |     |  |  |     |  |
| 149            | 1.52                  | 1.30          | 85.5                  |           | 10  |         |                                                                                                                                   |                        |                     |                |    |    |    | 149 |       |               |                    |     |  |  |     |  |
| 149            | -149.26               |               |                       |           |     |         |                                                                                                                                   |                        |                     |                |    |    |    |     | 23    |               |                    |     |  |  |     |  |
| 150            |                       |               |                       |           |     |         |                                                                                                                                   |                        |                     |                |    |    |    |     | 327   |               |                    |     |  |  |     |  |



DIAMOND DRILL HOLE

YJ 86-14





| DRILL INTERVAL |       | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD    | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                             | ALTERATION AND VEINING | MINERAL PERCENTAGES |    |    |    |          | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |    |     | LAB |
|----------------|-------|-----------------------|---------------|-----------------------|-----------|--------|---------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|----|----|----------|-------|---------------|--------------------|----|----|-----|-----|
| FROM           | TO    |                       |               |                       |           |        |         |                                                                                                                                     |                        | PY                  | PH | QZ | TC | Calc     |       |               | FA                 | Au | Ag | gpt |     |
| 35             |       |                       |               |                       |           |        |         | 32.0 - 41.2 contd.                                                                                                                  |                        |                     |    |    |    |          |       |               |                    |    |    |     | 35  |
| 36             | 36.12 |                       |               |                       |           | 20     | ↓       | between 37.10 - 39.4 semi continuous fracture @ 0° of green translucent polished serpentine with talcose feel ∴ trace talc.         | serpentine vltz        | tr.                 | 8  |    |    | 0.5 (-)  |       |               |                    |    |    |     | 36  |
| 37             | 1.52  | 1.97                  | 97            |                       |           | Broken |         |                                                                                                                                     |                        |                     |    |    |    |          |       |               |                    |    |    |     | 37  |
| 38             | 37.64 |                       |               |                       |           | 22     |         |                                                                                                                                     |                        |                     |    |    |    |          |       |               |                    |    |    |     | 38  |
| 39             | 1.53  | 1.98                  | 97            |                       |           |        |         | 41.2 - 60.68 serpentinite, massive blue grey ± ~ 5% dk blue grey spots, ~ 0.5% serpentine vltz, is few than between 40.67 - 41.2    |                        |                     |    |    |    |          |       |               |                    |    |    |     | 39  |
| 40             | 39.17 |                       |               |                       |           | 25     |         | mottles often is restricted to pale rims around the dk blue grey spots often associated ± the mottles often are orange yellow spots |                        |                     |    |    |    |          | 40.0  |               |                    |    |    |     | 40  |
| 41             | 40.69 |                       |               |                       |           | 12     |         | orange yellow spots @: 44.1 - 48.5                                                                                                  |                        |                     |    |    |    |          | ↓     | 2372          | 607                |    |    |     | 41  |
| 42             | 1.68  | 1.91                  | 84            |                       |           |        |         | 52.4 - 55.7                                                                                                                         |                        |                     |    |    |    | 0.25 (-) | 42.0  |               |                    |    |    |     | 42  |
| 43             | 42.37 |                       |               |                       |           | 12     |         | 50.0 - 80.60 dk green serpentinite w/ 5% possible weakly silicified                                                                 |                        |                     |    |    |    |          |       |               |                    |    |    |     | 43  |
| 44             | 1.52  | 1.52                  | 100           |                       |           | 8      |         | between 45.0 - 52.0m serpentinite vltz nearly absent                                                                                |                        |                     |    |    |    |          |       |               |                    |    |    |     | 44  |
| 45             | 43.89 |                       |               |                       |           | 5      |         | 49.6 - 54.6 local broken zones ± white hydrous on fracture coatings                                                                 |                        |                     |    |    |    |          |       |               |                    |    |    |     | 45  |
| 46             | 1.53  | 1.95                  | 95            |                       |           |        |         | - throughout 41.2 - 60.68 (w/ 5% minor amounts found on fract surfaces most surfaces coated ± white hydrous → Brucite?              |                        |                     |    |    |    |          |       |               |                    |    |    |     | 46  |
| 47             | 44.94 |                       |               |                       |           | 4      |         |                                                                                                                                     |                        |                     |    |    |    |          |       |               |                    |    |    |     | 47  |
| 48             | 1.52  | 1.52                  | 100           |                       |           |        |         |                                                                                                                                     |                        |                     |    |    |    |          |       |               |                    |    |    |     | 48  |
| 49             | 48.96 |                       |               |                       |           | 10     |         |                                                                                                                                     |                        |                     |    |    |    |          |       |               |                    |    |    |     | 49  |
| 50             | 1.53  | 1.53                  | 100           |                       |           |        |         |                                                                                                                                     |                        |                     |    |    |    |          | 49.5  | 2372          | <                  |    |    |     | 50  |



























DIAMOND DRILL HOLE

YJ 86-15



HOMESTAKE MINERAL DEVELOPMENT CO.

DIAMOND DRILL LOG

Page 1 of 1A

|                                 |                                |
|---------------------------------|--------------------------------|
| PROJECT <u>YELLOWJACKET</u>     | ELEVATION _____                |
| HOLD DESIGNATION <u>Y186-15</u> | AZMUTH <u>340°</u>             |
| NTS <u>104N/12</u>              | DIP <u>-60°</u>                |
| CLAIM <u>Beama</u>              | LENGTH OF HOLE <u>199.03 m</u> |
| EASTING <u>26 + 93 E</u>        | CORE DIAMETER <u>H</u>         |
| NORTHING <u>1 + 10 S</u>        | reduced to N at <u>M</u>       |

CONTRACTOR CONNORS  
 DATE STARTED 14/9/86  
 DATE FINISHED 18/9/86  
 LOGGED BY M. O'DONNELL, P. Renning  
 DATE SEPT 24, 1986  
 SCALE 1:100 - 1cm = 1m

BASELINE \_\_\_\_\_  
 TEST DEPTH 77.2 152.4 \_\_\_\_\_ meters  
 AZMUTH \_\_\_\_\_  
 DIP -57 60 \_\_\_\_\_

Meters

| DRILL INTERVAL<br>FROM TO | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                               | ALTERATION and VEINING | MINERAL PERCENTAGES |    |  |       | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |  |  | LAB |
|---------------------------|-----------------------|---------------|-----------------------|-----------|-----|---------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|--|-------|-------|---------------|--------------------|----|--|--|-----|
|                           |                       |               |                       |           |     |         |                                                                                                                                       |                        | mt                  | py |  |       |       |               | FA                 | Fe |  |  |     |
| 0-7.9                     |                       |               |                       |           |     |         | 0-7.9 m Casact. No core recovered.                                                                                                    |                        |                     |    |  | 7.9   |       |               |                    |    |  |  |     |
| 7.9-8.2                   | 0.3                   | 15            | 50                    |           |     |         | 7.9 to 8.1 SERPENTINITE                                                                                                               |                        |                     |    |  | 8     |       |               |                    |    |  |  |     |
| 8.2-9.75                  | 1.55                  | 130           | 83.8                  |           |     |         | Bluish grey-green fr massive serp. abundantly fractured to brecciated. oxidized, yellow to redish-along fr surfaces. magnetic, mt vlg |                        |                     |    |  | 10.52 | 23390 | <             |                    |    |  |  |     |
| 9.75-10.52                | 0.77                  | 75            | 97.4                  |           |     |         | 8.7-9.7: bx-zone, clast supported w/ serp-gouge matrix. Seriate sim 2cm, sub angular                                                  |                        |                     |    |  | 12.19 | 23391 | <             |                    |    |  |  |     |
| 10.52-12.19               | 1.67                  | 155           | 92.8                  |           |     |         | 9.2-9.4 bx chalcid. qv white - pale blue qtz carb                                                                                     |                        |                     |    |  | 13.72 | 23392 | <             |                    |    |  |  |     |
| 12.19-13.72               | 1.53                  | 150           | 98.0                  |           |     |         | 9.75-10.5 rusty spots 1-2mm Fe-bearing? 11.2-11.5 fr bx-zone includes white qtz & 12 carb clasts                                      |                        |                     |    |  | 14.73 | 23393 | 0.07          |                    |    |  |  |     |
| 13.72-14.73               | 1.01                  | 105           | 86.8                  |           |     |         | 12.54-13.72 Serp clast gouge bx sub-rounded clast local matrix support brown gouge, bright-orange rusty fracture surfaces             |                        |                     |    |  | 16.46 | 23394 | 0.14          |                    |    |  |  |     |
| 14.73-16.46               | 1.73                  | 105           | 86.8                  |           |     |         | 13.72-15.7 massive dk grey-green serp pale yellow-green blotches                                                                      |                        |                     |    |  | 17    |       |               |                    |    |  |  |     |
| 16.46-17                  | 0.54                  | 60            | 69.8                  |           |     |         | 14.5-14.93 Serp SE sup carb-healed                                                                                                    |                        |                     |    |  |       |       |               |                    |    |  |  |     |
| 17-19                     |                       |               |                       |           |     |         | 15.7- Blue/whit serp w/ green speckled to 16 total-gouge zones 15.9-16.35 15% pale green speckles 1-3mm                               |                        |                     |    |  |       |       |               |                    |    |  |  |     |

Note: < means less than 0.07 gpt.













| DRILL INTERVAL | RECOVERED LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                           | ALTERATION and VEINING      | MINERAL PERCENTAGES |  |  |  | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |     |  | LAB |
|----------------|------------------|---------------|-----------------------|-----------|-----|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--|--|--|-------|---------------|--------------------|----|-----|--|-----|
|                |                  |               |                       |           |     |         |                                                                                                                                                                   |                             | wt                  |  |  |  |       |               | Fe                 | As | gpt |  |     |
| FROM           | TO               |               |                       |           |     |         |                                                                                                                                                                   |                             |                     |  |  |  |       |               |                    |    |     |  |     |
| 92.81          | 1.52             | 1.52          | 100                   |           | 18  |         | 92.1-92.2 10% white ex cc<br>92.65 X-cutting cc v to predom 60<br>92.8-117.5 Serpentinite                                                                         | 92.1<br>cl/fo<br>cc         |                     |  |  |  | 72.8  |               |                    |    |     |  | 92  |
| 94.47          | 1.68             | 1.54          | 98.1                  |           | 11  |         | Blue-hued to dk green, vfg<br>massive rock<br>Fr (cpx) healed w/ short-fibred<br>sep & talc mg.<br>Mt diss + in stringers → red-orange<br>rusty wx on fr surfaces | 8-10<br>short<br>sep        |                     |  |  |  | 77.8  | 23486         | 0.31               |    |     |  | 94  |
| 96.01          | 1.52             | 1.60          |                       |           | 14  |         |                                                                                                                                                                   | 6-10                        |                     |  |  |  | 78.8  | 23487         | <                  |    |     |  | 96  |
| 97.57          | 1.53             | 1.52          | 100                   |           | 9   |         | 96.8-97. Talc (white powdery) on<br>fr surfaces                                                                                                                   | Y-tal                       |                     |  |  |  | 78.8  |               |                    |    |     |  | 96  |
| 99.06          | 1.52             | 1.52          | 100                   |           | 7   |         | 77-97.5: Incipient "spotted serp"<br>gray serp w/ darker mt-rich spots<br>(have 4-6% spots)                                                                       | 10-12                       |                     |  |  |  | 78.8  | 23488         | <                  |    |     |  | 98  |
| 100.58         | 1.52             | 1.51          | 99.3                  |           | 3   |         | 99.85-<br>bleached, bluish-green, + pale green<br>veinlet network: serp + cpx (cr), in<br>matrix of wky mt-spotted serp.                                          | 10-11                       |                     |  |  |  | 100.8 | 23489         | 0.07               |    |     |  | 100 |
| 102.12         | 1.54             | 1.40          | 90.9                  |           | (1) |         |                                                                                                                                                                   | (1)                         |                     |  |  |  | 102.8 | 23490         | <                  |    |     |  | 102 |
| 102.63         | 1.51             | 1.51          | 100                   |           | 8   |         | 102.52-104.42 Intensely altered<br>clay zone: talc-rich at contacts<br>grading to gray "sticky clay" or<br>clay + serp + phlog (cfs)                              | 6-10<br>cl/fo<br>(c) + serp |                     |  |  |  | 102.5 | 23491         | <                  |    |     |  | 102 |
| 102.16         | 1.53             | 1.48          | 96.7                  |           | 12  |         | 105.1-105.7 wlc serp - zone bx                                                                                                                                    | 0                           |                     |  |  |  | 104.2 | 23491         | 0.17               |    |     |  | 104 |
| 106.83         | 1.67             | 1.52          | 91.0                  |           | 21  |         | 106.7-107.9. Gauge - box                                                                                                                                          | 23                          |                     |  |  |  | 106.4 | 23492         | <                  |    |     |  | 106 |

| DRILL INTERVAL | RECOVERED LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC     | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                          | ALTERATION AND VEINING | MINERAL PERCENTAGES |    |  |        | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |     |  | LAB |
|----------------|------------------|---------------|-----------------------|-----------|-----|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|--|--------|-------|---------------|--------------------|----|-----|--|-----|
|                |                  |               |                       |           |     |             |                                                                                                                                                                                                                                  |                        | mt                  |    |  |        |       |               | Fe                 | As | gpt |  |     |
| 107            | 107.90           | 1.07          | 102                   | 95.3      |     | 16 → rubble | Serpentinite cont.                                                                                                                                                                                                               |                        |                     |    |  |        |       |               |                    |    |     |  |     |
| 108            |                  | 1.52          | 145                   | 95.4      |     | 19          | 107.91 dk tan-brown resinous antigorite w/ bright light green, talcose contacts<br>108-111 - red-rusty wx fr surfaces                                                                                                            |                        |                     |    |  | 108    | 23443 | 0.07          |                    |    |     |  | 108 |
| 110            | 107.42           | 1.68          | 140                   | 83.3      |     | 13          |                                                                                                                                                                                                                                  |                        |                     |    |  | 110    | 23444 | 0.14          |                    |    |     |  | 110 |
| 112            | 111.10           | 1.68          | 154                   | 91.7      |     | 11          | 112.8-112.9 pale green bleached serp<br>113.9-114.3 Talc-serp                                                                                                                                                                    | carb rec               | 5-6                 |    |  | 112    | 23445 | 0.07          |                    |    |     |  | 112 |
| 114            | 114.30           | 1.52          | 152                   | 100       |     | 10          | 114.3 - v.f. carb (r) network 30/20cm                                                                                                                                                                                            | carb rec               | 42                  | 8  |  | 114.3  | 23446 | <             |                    |    |     |  | 114 |
| 116            | 116.43           | 2.13          | 160                   | 75        |     | 5           | pale grey serp, white ramifying cc veinlets, w/ carb (r) cement<br>cc veins bleaching in sup.<br>possible mp? (<2%)                                                                                                              | carb rec               | 30                  | tr |  | 116    | 23447 | 0.17          |                    |    |     |  | 116 |
| 118            | 117.35           | 0.93          | 155                   | ?         |     | 2           | 117.50 talc/chl<br>* Confusion in core labelling here -><br>next box has 17.35 block<br>117.50? or so.<br>to 130 Gabbro (diabase)                                                                                                | talc                   |                     | <1 |  | 117.35 | 23448 | <             |                    |    |     |  | 118 |
| 120            | 119.02           | 1.67          | 140                   | 98        |     | rubble      | v.f. to mg dk green altered pr. fld gabbro. fld → carb (r) or cc<br>- <5% creamy gte or carb (r) veins<br>- fr smeared w/ serp<br>- moderately hard rock<br>- cc matrix + fine stringers (<5%)<br>- gran size decrease w/ depth. | carb rec               | 1142                | tr |  | 119.02 | 23449 | 0.10          |                    |    |     |  | 120 |
|                | 119.63           | 0.61          | 140                   | 65        |     | rubble      |                                                                                                                                                                                                                                  |                        |                     |    |  | 119.63 |       |               |                    |    |     |  |     |
|                | 121.01           | 1.38          | 125                   | 90 B      |     | 8           |                                                                                                                                                                                                                                  |                        |                     |    |  | 121.01 | 23450 | 0.10          |                    |    |     |  |     |

\* Start of Box 20 appears discontinuous and end of 1 = 20



| DRILL INTERVAL | FROM | TO   | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD                    | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                    | ALTERATION and VEINING | MINERAL PERCENTAGES |     |    |    |     | DEPTH  | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |    |    | LAB |     |
|----------------|------|------|-----------------------|---------------|-----------------------|-----------|------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|-----|----|----|-----|--------|---------------|--------------------|----|----|----|-----|-----|
|                |      |      |                       |               |                       |           |                        |         |                                                                                                                                                                            |                        | Py                  | Pb  | Mt | Te | cbt |        |               | FA                 | Au | Ag | Cu |     | LAB |
| 137.77         | 1.53 | 1.40 | 91.5                  |               |                       |           | 8 → rubble             | S       | 137.71 qt veinlet, 2mm, 60°<br>138.00-138.23 Talc brk.<br>138.23-139.1 lam qt vein at 60°<br>139-139.1 Fault brk. Frags cbt + scap. in talcose clay gouge.<br>139.7-139.86 |                        | 1                   | 1   | tr | 5  | 15  | 138    | 23459         | <                  |    |    |    |     | 138 |
| 139.29         | 1.52 | 1.52 | 100                   |               |                       |           | 9                      | S       |                                                                                                                                                                            |                        | 1                   | 1   |    | 5  | 15  | 139    | 23460         | <                  |    |    |    |     |     |
| 140.82         | 1.53 | 1.40 | 91.5                  |               |                       |           | 4                      | S       | 140.70-146.96 Dike? Unknown composition. Fx, equigranular, mixture light colored clear mineral, calcite, black unknown mineral (carbon?).                                  |                        | 1                   | 1   | tr | 5  | 15  | 140    | 23461         | <                  |    |    |    |     |     |
| 142.34         | 1.52 | 1.53 | 100                   |               |                       |           | 16                     | S       | 146.46-152.5 Altered serpentinite. Spotted with light colored talc and x-cut by talc-cbt veins. Finely dissem po + py ≈ 2%.                                                |                        | 1                   | 1   | tr | 5  | 15  | 142    | 23462         | <                  |    |    |    |     |     |
| 143.26         | 0.92 | 0.85 | 92.4                  |               |                       |           | 10                     | S       | 147-147.3 Broken + rubbly.                                                                                                                                                 |                        | 1                   | 1   | tr | 5  | 5   | 144    | 23462         | <                  |    |    |    |     |     |
| 144.78         | 1.52 | 1.52 | 100                   |               |                       |           | 13 (minst)             | S       | 149.90-150.64 Fault zone. Broken, rubbly, talcose with fragments serpentinite and calcite vein cbt veinlets.                                                               |                        | 1                   | 1   | tr | 5  | 3   | 144.70 | 23462         | included in 23462  |    |    |    |     |     |
| 146.46         | 1.68 | 1.53 | 91.1                  |               |                       |           | 14 (handing to rubble) | S       | 151.56-151.66 25% Pb with 1% py. Coarse blebs of fine xstals.                                                                                                              |                        | 1/2                 | 1/2 | tr | 5  | 3   | 146.46 | 23464         | <                  |    |    |    |     |     |
| 147.98         | 1.52 | 1.48 | 97.4                  |               |                       |           | 14 (handing to rubble) | S       |                                                                                                                                                                            |                        | 1/2                 | 1/2 | tr | 5  | 3   | 148    | 23465         | 0.07               |    |    |    |     |     |
| 149.66         | 1.68 | 1.50 | 89.3                  |               |                       |           | 7                      | S       |                                                                                                                                                                            |                        |                     |     |    | 5  | 3   | 149    | 23466         | <                  |    |    |    |     |     |
| 151.10         | 1.52 | 1.46 | 96.1                  |               |                       |           | 7                      | S       |                                                                                                                                                                            |                        | 1/2                 | 1/2 | tr | 5  | 3   | 150    | 23467         | <                  |    |    |    |     |     |
| 152.10         | 1.52 | 1.42 | 93.4                  |               |                       |           | 6                      | S       |                                                                                                                                                                            |                        | 1/2                 | 1/2 | tr | 5  | 3   | 152    | 23467         | <                  |    |    |    |     |     |



1:100

1 cm = 1 m

| DRILL INTERVAL | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD    | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                              | ALTERATION AND VEINING | MINERAL PERCENTAGES |    |    |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |     |  | LAB |
|----------------|-----------------------|---------------|-----------------------|-----------|--------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|----|----|----|-----|-------|---------------|--------------------|----|-----|--|-----|
|                |                       |               |                       |           |        |         |                                                                                                                                                                                      |                        | Py                  | Po | Mt | Qt | Tc | Lbr |       |               | FA                 | AN | ZPT |  |     |
| 167<br>-167.15 |                       |               |                       |           |        |         |                                                                                                                                                                                      | X-qt                   |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 168<br>-168.71 | 1.53                  | 1.36          | 88.9                  |           | 9      |         |                                                                                                                                                                                      | X-qt                   |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 169<br>-169.26 | 0.55                  | 0.38          | 69.1                  |           | rubble |         | 168.71-175.77 Dioritic hb porphyry. 10% black, relatively fresh laths hb in Sr groundmass of Sp. and chloritized matrix (biotite?). Weakly magnetic, unaltered, very little veining. |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 170<br>-170.84 | 1.58                  | 1.34          | 84.8                  |           | 8      |         |                                                                                                                                                                                      |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 171<br>-171.91 | 1.07                  | 0.81          | 75.7                  |           | 12     |         | 172.49 Anastomosed qt veinlet at 25°                                                                                                                                                 |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 172<br>-173.93 | 1.52                  | 1.24          | 81.6                  |           | 30     |         | 173.78 Qt veinlet at 55°<br>173.9 At veinlet at 45°                                                                                                                                  |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 174<br>-174.80 | 1.37                  | 1.19          | 86.9                  |           | 6      |         | 175.77-180.53 Diabase. Finely crystalline. 30% black pyx; partially altered to serp.                                                                                                 | 55<br>45/F-qt          |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 175<br>-175.87 | 1.07                  | 0.81          | 75.7                  |           | rubble |         | Remainder mainly plag. Variably silicified; pervasively silicified rock recognized mainly by extreme hardness.                                                                       |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 176<br>-177.39 | 1.52                  | 1.49          | 98.0                  |           | 9      |         | qt veinlets common; mainly discontinuous, anastomosed, wispy, irregular outlines, bent, 2 generations; early, opaque, white; later, grey, semi-clear.                                | has<br>F-qt            |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 178<br>-178.00 | 0.61                  | 0.49          | 80.3                  |           | 15     |         | Py trace.                                                                                                                                                                            |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 179<br>-178.61 | 0.61                  | 0.61          | 100                   |           | 15     |         | 176.25 Calcite veinlet, 11 c.a.                                                                                                                                                      |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 180<br>-179.83 | 1.22                  | 1.18          | 98.3                  |           | 10     |         | 180.53-196.83 Medium crystalline gabbro. Abrupt change from previous rock.                                                                                                           |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 181<br>-181.36 | 1.53                  | 1.41          | 92.2                  |           | 10     |         | 10% chloritized pyx; most of remainder plag. <del>trace</del> trace py.                                                                                                              |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
| 182<br>-181.36 | 1.06                  | 1.03          | 97.2                  |           | 20     |         | Matrix more altered than previous rock; this may be older. 3% black metallic, probably ilmenite.                                                                                     |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |
|                |                       |               |                       |           |        |         | qt veins + veinlets in style identical to previous rock.                                                                                                                             |                        |                     |    |    |    |    |     |       |               |                    |    |     |  |     |

23K7K 0.07

23K7B <







DIAMOND DRILL HOLE

YJ 86-16









| DRILL INTERVAL | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | RQD | GRAPHIC   | ROCK TYPE (DESCRIPTION)                                                                                                                                                         | ALTERATION and VEINING | MINERAL PERCENTAGES |    |    |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  | LAB |
|----------------|-----------------------|---------------|-----------------------|-----------|-----|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|----|----|----|-----|-------|---------------|--------------------|--|--|--|-----|
|                |                       |               |                       |           |     |           |                                                                                                                                                                                 |                        | Py                  | Po | Mt | Qt | Tc | Cbt |       |               | Au g/t             |  |  |  |     |
| 57             |                       |               |                       |           |     |           |                                                                                                                                                                                 |                        |                     |    |    |    |    |     |       |               |                    |  |  |  |     |
| 58             | 1.52                  | 1.52          | 100                   |           | 6   | Diabase X | 59.75-64.60 Highly altered serpentinite. Major alteration mineral is talc. Significant calcite also present.                                                                    | ca                     |                     |    |    |    |    | 30  | 58    | 23758         | L                  |  |  |  |     |
| 59             | 1.53                  | 1.50          | 98.0                  |           | 12  | X         | 60.32-60.64 white, crumbly, partly brxtal.                                                                                                                                      | ca                     |                     |    |    |    |    |     | 59    | 23758         | L                  |  |  |  |     |
| 60             | 1.52                  | 1.52          | 100                   |           | 6   | S         | 60.64-64.29 Mottled grey-black, waxy. P <sub>o</sub> 7%, P <sub>z</sub> tr.<br>63-70 Zone clay gouge, Acmy, 40°                                                                 | tc-ca                  | tr                  | 7  | 3  |    | 80 | 10  | 60    | 23759         | 0.07               |  |  |  |     |
| 61             | 1.52                  | 1.52          | 100                   |           | 6   | S         | 64.29-64.60 Green fibrous serpentinite and talc. Mt 1% P <sub>o</sub> 2%                                                                                                        | tc-ca                  |                     |    |    |    |    |     | 61    | 23759         | 0.07               |  |  |  |     |
| 62             | 1.52                  | 1.43          | 94.1                  |           | 10  | S         | 64.60-70.81 Diabase. A few qt stringers; otherwise relatively unaltered.                                                                                                        | tc-ca                  |                     |    |    |    |    |     | 62    | 23760         | 0.14               |  |  |  |     |
| 63             | 1.53                  | 1.40          | 91.5                  |           | 7   | S         | 67.90 py veinlet at 80°                                                                                                                                                         | tc-ca                  |                     |    |    |    |    |     | 63    | 23760         | 0.14               |  |  |  |     |
| 64             | 1.52                  | 1.36          | 89.5                  |           | 7   | S         | 68.00-69.10 1/2% P <sub>o</sub> dissem.                                                                                                                                         | tc-ca                  | tr                  | 2  | 1  |    | 80 | 5   | 64    | 23761         | 0.07               |  |  |  |     |
| 65             | 1.52                  | 1.36          | 89.5                  |           | 7   | Y         | 70.51-74.50 Serpentinite. Weakly magnetic. Spotted with cbt and cut by a few cbt stringers or veinlets. Weak talc altn. P <sub>o</sub> 5%, dissem. Clay gouge at lower contact. |                        |                     |    |    |    |    |     | 65    | 23761         | 0.07               |  |  |  |     |
| 66             | 1.53                  | 1.45          | 94.8                  |           | 7   | X         | 74.50- Diabase. Very fx. Very hard; silicified. Spots and veinlets of opaque white qt. locally. Traces py.                                                                      |                        |                     |    |    |    |    |     | 66    | 23762         | 0.07               |  |  |  |     |
| 67             | 1.52                  | 1.32          | 86.8                  |           | 7   | diabase   |                                                                                                                                                                                 |                        |                     |    |    |    |    |     | 67    | 23762         | 0.07               |  |  |  |     |
| 68             | 1.52                  | 1.37          | 90.1                  |           | 7   | Y         | 74.65 qt vein, 1cm, 50°                                                                                                                                                         |                        |                     |    |    |    |    |     | 68    | 23763         | L                  |  |  |  |     |
| 69             | 1.52                  | 1.37          | 90.1                  |           | 7   | X         |                                                                                                                                                                                 |                        |                     |    |    |    |    |     | 69    | 23763         | L                  |  |  |  |     |
| 70             | 1.52                  | 1.37          | 90.1                  |           | 7   | S         |                                                                                                                                                                                 |                        |                     |    |    |    |    |     | 70    | 23763         | L                  |  |  |  |     |
| 71             | 1.53                  | 1.50          | 98.0                  |           | 7   | S         |                                                                                                                                                                                 | cbt (tc)               | tr                  | 5  | 1  |    | 2  | 15  | 71    | 23764         | L                  |  |  |  |     |
| 72             |                       |               |                       |           |     | S         |                                                                                                                                                                                 | cbt (tc)               |                     |    |    |    |    |     | 72    | 23764         | L                  |  |  |  |     |









| DRILL INTERVAL | FROM | TO   | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROO    | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                          | ALTERATION and VEINING | MINERAL PERCENTAGES |   |    |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |    |    | LAB |  |
|----------------|------|------|-----------------------|---------------|-----------------------|-----------|--------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|---|----|----|----|-----|-------|---------------|--------------------|----|----|----|-----|--|
|                |      |      |                       |               |                       |           |        |         |                                                                                                                                                                  |                        | py                  | p | mt | qt | tc | cbt |       |               | FA                 | AN | SP | WT |     |  |
| 117            |      |      |                       |               |                       |           |        |         | 118.59-119 50% patches and fragments opaque white qt.                                                                                                            |                        |                     |   |    |    |    | 117 |       |               |                    |    |    |    |     |  |
| 118            |      | 1.37 | 1.39                  | 100.0         |                       |           | 14     | diabase | 119.40-121.83 Serpentinite. Soft; variably talcose. Moderately magnetic 1.5% py, dissem. Calcite common as spots & veinlets.                                     | 118.59-119             |                     |   |    | 30 |    |     | 23786 | <             |                    |    |    |    |     |  |
| 119            |      |      | 1.53                  | 86.9          |                       |           | 6      |         | 120.32 Calcite vein, 1cm, 75°                                                                                                                                    | 119.40-121.83          |                     |   |    | 50 |    |     | 119.4 |               |                    |    |    |    |     |  |
| 120            |      | 0.76 | 0.44                  | 57.9          |                       |           | 40     |         | 121.83-122.39 vfx diabase. Mafics chloritized; otherwise relatively unaltered.                                                                                   | 120.32                 | 1.5                 |   | 3  |    | 20 | 5   | 120   | 23787         | 0.07               |    |    |    |     |  |
| 121            |      | 0.91 | 0.49                  | 53.8          |                       |           | 14     | rubble  | 122.39-129.6 Serpentinite. Dominantly black, hard, siliceous, silicified. Mt 10%. Py 2%, variable.                                                               | 121.83-122.39          |                     |   |    |    |    |     | 121   | 23788         | 0.07               |    |    |    |     |  |
| 122            |      | 1.52 | 1.34                  | 88.2          |                       |           | 9      |         | 122.39-122.83. broken crumbly. Fine frags. serp. in talcose clay gouge.                                                                                          | 122.39-122.39          |                     |   |    |    |    |     | 122   | 23789         | <                  |    |    |    |     |  |
| 123            |      | 1.37 | 0.87                  | 63.5          |                       |           | rubble |         | 122.83-12343 Soft serp with talc-cbt. altn.                                                                                                                      | 122.39-122.83          |                     |   |    |    |    |     | 123   |               |                    |    |    |    |     |  |
| 124            |      | 1.38 | 0.70                  | 50.7          |                       |           | rubble |         | 125.11-126.3 10% white spots, 1-2mm. Cbt, now locally silicified. Locally talcose.                                                                               | 122.83-12343           | 2                   |   | 10 | 30 | 5  | 3   | 124   | 23790         | <                  |    |    |    |     |  |
| 125            |      | 1.22 | 0.94                  | 77.0          |                       |           | 22     |         | 129.6-134.95 Serpentinite. Dominant altn is now talc-cbt, not silicification. Atn. occurs as network of stringers & veinlets. Very broken and bubbly throughout. | 125.11-126.3           |                     |   |    |    |    |     | 125   | 23791         | <                  |    |    |    |     |  |
| 126            |      | 1.06 | 0.71                  | 67.0          |                       |           | rubble |         |                                                                                                                                                                  | 129.6-134.95           |                     |   |    |    |    |     | 126   |               |                    |    |    |    |     |  |
| 127            |      | 1.53 | 1.42                  | 92.8          |                       |           | 17     |         |                                                                                                                                                                  | 126.3-129.6            |                     |   |    |    |    |     | 127   | 23792         | <                  |    |    |    |     |  |
| 128            |      | 1.37 | 0.67                  | 48.9          |                       |           | rubble |         |                                                                                                                                                                  | 129.6-134.95           | 2                   |   | 10 | 20 | 20 | 10  | 128   | 23793         | <                  |    |    |    |     |  |
| 129            |      |      |                       |               |                       |           |        |         |                                                                                                                                                                  | 130-131                |                     |   |    |    |    |     | 129   |               |                    |    |    |    |     |  |
| 130            |      |      |                       |               |                       |           |        |         |                                                                                                                                                                  | 131-132                |                     |   |    |    |    |     | 130   |               |                    |    |    |    |     |  |
| 131            |      |      |                       |               |                       |           |        |         |                                                                                                                                                                  |                        |                     |   |    |    |    |     | 131   |               |                    |    |    |    |     |  |
| 132            |      |      |                       |               |                       |           |        |         |                                                                                                                                                                  |                        |                     |   |    |    |    |     | 132   |               |                    |    |    |    |     |  |









DIAMOND DRILL HOLE

YJ 86-17

























LS Sept 1, 2 3

| PROJECT <u>Yellow Jacket</u> |        | HOLE DESIGNATION <u>YS 06-17</u> |                       | LOGGED BY <u>MWH</u> |                       | SCALE <u>1cm = 1m</u> |             | PAGE <u>10</u> OF <u>12</u> |                                                                                                                                                                                                                                                                                                            |                        |                     |    |    |    |        |       |               |                    |    |    |    |     |     |     |
|------------------------------|--------|----------------------------------|-----------------------|----------------------|-----------------------|-----------------------|-------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|----|----|--------|-------|---------------|--------------------|----|----|----|-----|-----|-----|
| DRILL INTERVAL               | FROM   | TO                               | RECOVERED CORE LENGTH | CORE RECOVERY        | FOLIATION OR CLEAVAGE | STRUCTURE             | ROD         | GRAPHIC                     | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                                    | ALTERATION and VEINING | MINERAL PERCENTAGES |    |    |    |        | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |    |    | LAB |     |     |
|                              |        |                                  |                       |                      |                       |                       |             |                             |                                                                                                                                                                                                                                                                                                            |                        | Px                  | Mg | Oz | fc | Ca     |       |               | Au                 | Ag | As | Sb |     |     |     |
| 142                          | 142.34 |                                  |                       |                      |                       |                       |             |                             | 139.18 - 144.87 (cont'd) magnetic;<br>see: note page for info on bleaching<br>Some fracture: one slightly talcose<br>- about 50% of unit is bleached & a<br>general trend of bleaching increasing<br>down hole                                                                                             | Tr                     |                     | 2  |    |    | 1      | 142.0 |               |                    |    |    |    |     |     | 142 |
| 143                          |        | 3.05                             | 2.98                  | 98                   |                       |                       | 4           |                             |                                                                                                                                                                                                                                                                                                            | BLEACHED<br>Crs        |                     |    |    |    |        | 23493 | 0.07          |                    |    |    |    |     | 143 |     |
| 144                          |        |                                  |                       |                      |                       |                       |             |                             |                                                                                                                                                                                                                                                                                                            |                        |                     |    | Tr | 2  | 144.0  |       |               |                    |    |    |    |     | 144 |     |
| 145                          | 145.39 |                                  |                       |                      |                       |                       | 10          |                             | 144.2 2mm QZ/crs vlt @ 80'<br>E bleaching intense for 2cm on<br>either side                                                                                                                                                                                                                                | BLEACHED               |                     | 1  |    | 2  | 145.0  | 23492 | <             |                    |    |    |    |     | 145 |     |
| 146                          |        |                                  |                       |                      |                       |                       |             |                             |                                                                                                                                                                                                                                                                                                            |                        |                     |    |    |    | 146.0  |       |               |                    |    |    |    |     | 146 |     |
| 147                          |        | 3.05                             | 2.90                  | 95                   |                       |                       | Rubble<br>7 |                             | 144.87 - 152.06 BLEACHED serpentinite<br>pale grey green, slightly mottled; bleaching<br>is more pervasive; fragments which can<br>be made out here are v. weak magnetism;<br>in oblique similar to above slatonic<br>serpentinite; Crs vlt are more abdt<br>than above veins to 1cm between 148-<br>150m; | Crs<br>bleached        |                     |    |    |    |        | 23491 | 0.07          |                    |    |    |    |     |     | 147 |
| 148                          | 148.94 |                                  |                       |                      |                       |                       |             |                             |                                                                                                                                                                                                                                                                                                            |                        |                     |    |    |    | 148.0  |       |               |                    |    |    |    |     | 148 |     |
| 149                          |        |                                  |                       |                      |                       |                       | 7           |                             |                                                                                                                                                                                                                                                                                                            |                        |                     |    |    |    |        | 23490 | 0.07          |                    |    |    |    |     | 149 |     |
| 150                          |        | 3.05                             | 2.96                  | 97                   |                       |                       | 11          |                             | 150.18 - 150.66 weak to mid magnetic<br>- lower Ctc @ 85-90'                                                                                                                                                                                                                                               |                        |                     | 2  |    |    | 150.0  |       |               |                    |    |    |    |     | 150 |     |
| 151                          | 151.99 |                                  |                       |                      |                       |                       |             |                             |                                                                                                                                                                                                                                                                                                            |                        |                     |    |    |    |        | 23489 | <             |                    |    |    |    |     | 151 |     |
| 152                          |        | 1.37                             | 1.25                  | 91                   |                       |                       | 12          | CTC 85-90'                  |                                                                                                                                                                                                                                                                                                            |                        |                     |    |    |    | 152.00 |       |               |                    |    |    |    |     | 152 |     |
| 153                          | 152.86 |                                  |                       |                      |                       |                       | gouge<br>8  |                             | 152.06 - 155.77 Fault Zone<br>Fault Breccia and gouge; fragments<br>of blue grey serpentinite some mid magnetic,<br>white Crs (+) frags, grey green soft chl?<br>possibly altered vlt frags.                                                                                                               | Crs                    |                     |    |    | 1  |        | 23488 | 0.07          |                    |    |    |    |     | 153 |     |
| 154                          |        | 3.05                             | 3.00                  | 98                   |                       |                       | 8           |                             |                                                                                                                                                                                                                                                                                                            |                        |                     |    |    |    | 154.0  |       |               |                    |    |    |    |     | 154 |     |
| 155                          |        |                                  |                       |                      |                       |                       | 8           |                             | 152.77 - 153.07 - grey green gouge/day<br>which has crack upon drying; vlt??<br>similar zone @ 153.30 - 153.50, 153.90 -<br>154.20, 155.44 - 155.59                                                                                                                                                        | talc<br>Crs            |                     |    |    | 50 | 3      | 23487 | 0.07          |                    |    |    |    |     |     | 155 |
| 156                          | 155.91 |                                  |                       |                      |                       |                       |             | CTC 30'                     | 154.95 - 155.44, 155.59 - 155.77 strongly<br>talcose gouge                                                                                                                                                                                                                                                 | bleached<br>Crs        | 1                   |    |    |    | 155.77 |       |               |                    |    |    |    |     | 156 |     |
| 157                          |        | 3.04                             | 3.04                  | 100                  |                       |                       | 15          |                             |                                                                                                                                                                                                                                                                                                            |                        |                     |    |    |    |        | 23486 | 0.07          |                    |    |    |    |     | 157 |     |



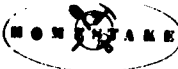


PROJECT YELLOW SACKET HOLE DESIGNATION J5 86-17 LOGGED BY MWH SCALE 1cm = 1m PAGE 12.1 OF 12

| DRILL INTERVAL |    | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ALTERATION and VEINING | MINERAL PERCENTAGES |  |  |  | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  | LAB |  |
|----------------|----|-----------------------|---------------|-----------------------|-----------|-----|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--|--|--|-------|---------------|--------------------|--|--|--|-----|--|
| FROM           | TO |                       |               |                       |           |     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                     |  |  |  |       |               |                    |  |  |  |     |  |
|                |    |                       |               |                       |           |     |         | <p>182.11-182.32 brecciated; cxc5 @ 85°</p> <p>182.32-182.39 sph, soft Hx2 dk green; waxy brecciated</p> <p>182.39-182.57 v.f.g, dk green Hx5 few white grey Qz fragments; cxc5 irregular and angular</p> <p>182.57-182.84 v.f.g med resin brown talcose unit grades into darker unit below Cu vein</p> <p>182.84-184.86 (E04) v.f.g green grey H ~ 4-4 1/2; unit becomes fault breccia below 183.70 &amp; local bleached or talcose zones</p> <p>Note: UNIT MAYBE a basalt, with remobilize serpentine along fractures with ultra mafic dikes altered serpentine intruding into it.</p> |                        |                     |  |  |  |       |               |                    |  |  |  |     |  |
|                |    |                       |               |                       |           |     |         | THE END:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        |                     |  |  |  |       |               |                    |  |  |  |     |  |
|                |    |                       |               |                       |           |     |         | time to sort                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |                     |  |  |  |       |               |                    |  |  |  |     |  |

DIAMOND DRILL HOLE

YJ 86-18



HOMESTAKE MINERAL DEVELOPMENT CO.

DIAMOND DRILL LOG

Page 1 of 2

PROJECT Yellowjacket ELEVATION \_\_\_\_\_  
 HOLD DESIGNATION YJ-86-18 AZMUTH 340°  
 NTS 104 N 12 DIP -60°  
 CLAIM Beama LENGTH OF HOLE 130.15  
 EASTING 17450E CORE DIAMETER HQ  
 NORTHING 1780S

CONTRACTOR Cannors Drilling  
 DATE STARTED \_\_\_\_\_  
 DATE FINISHED 30/9/86  
 LOGGED BY PAR  
 DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_

BASELINE \_\_\_\_\_  
 TEST DEPTH 

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| DRILL INTERVAL | FROM  | TO   | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD          | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                 | ALTERATION and VEINING | MINERAL PERCENTAGES |    |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  |  | LAB |  |  |
|----------------|-------|------|-----------------------|---------------|-----------------------|-----------|--------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|----|----|-----|-------|---------------|--------------------|--|--|--|--|-----|--|--|
|                |       |      |                       |               |                       |           |              |         |                                                                                                                                                                                                                         |                        | A <sub>1</sub>      | Mt | Sp | Tc | Cbt |       |               | Au g/t.            |  |  |  |  |     |  |  |
| 0              |       |      |                       |               |                       |           |              |         | 0-2.13 Casing                                                                                                                                                                                                           |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 1              |       |      |                       |               |                       |           |              |         | 2.13-14.51 Partly serpentinized ultramafic. Black, fr, highly magnetic. Probably originated as pyroxenite. Cut by network of bright green veinlets serpentine. Some of veinlets have cores of talc. Rare cbt. veinlets. |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 2              | 2.13  |      |                       |               |                       |           | 6            |         |                                                                                                                                                                                                                         |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 3              |       | 1.53 | 1.25                  | 81.7          |                       |           | +40cm rubble |         |                                                                                                                                                                                                                         |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 4              | 3.66  |      |                       |               |                       |           | 8            |         | 2.13-7.92 Broken up; rusty Fe oxides on fractural surfaces.                                                                                                                                                             | nil                    |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 5              |       | 1.52 | 1.41                  | 92.8          |                       |           |              |         | 8-8.90 25% of rock is mixture bright green serp + talc, as stockwork veinlets.                                                                                                                                          |                        |                     |    | 10 |    |     |       |               |                    |  |  |  |  |     |  |  |
| 6              | 5.18  |      |                       |               |                       |           | rubble       |         | 8.90-9.05 Massive grn. serp + talc.                                                                                                                                                                                     |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 7              |       | 1.37 | 1.15                  | 83.9          |                       |           |              |         | 9.70 Cr veinlet, Amm, 40°                                                                                                                                                                                               |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 8              | 6.55  |      |                       |               |                       |           | rubble       |         | 9.05-14.00 10% serp as veinlets. Most cored by cbt. Serp-cbt. veinlets x-cut by a few calcite veinlets.                                                                                                                 |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 9              | 7.92  |      |                       |               |                       |           | 8            |         |                                                                                                                                                                                                                         |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 10             |       | 1.53 | 1.51                  | 98.7          |                       |           | 8            |         |                                                                                                                                                                                                                         |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 11             | 9.45  |      |                       |               |                       |           |              |         |                                                                                                                                                                                                                         |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
| 12             | 10.97 |      |                       |               |                       |           | 7            |         |                                                                                                                                                                                                                         |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
|                |       | 1.52 | 1.43                  | 94.1          |                       |           |              |         |                                                                                                                                                                                                                         |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |
|                |       | 1.53 | 1.51                  | 98.7          |                       |           | 6            |         |                                                                                                                                                                                                                         |                        |                     |    |    |    |     |       |               |                    |  |  |  |  |     |  |  |

Note: < means less than 0.01 gpt

<









PROJECT Yellowjacket HOLE DESIGNATION DDH YJ-86-18 LOGGED BY PAR SCALE 1cm = 1m PAGE 5 OF 9

| DRILL INTERVAL | FROM  | TO   | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                    | ALTERATION and VEINING | MINERAL PERCENTAGES |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |  |  |  | LAB |
|----------------|-------|------|-----------------------|---------------|-----------------------|-----------|-----|---------|----------------------------------------------------------------------------|------------------------|---------------------|----|----|-----|-------|---------------|--------------------|--|--|--|-----|
|                |       |      |                       |               |                       |           |     |         |                                                                            |                        | Py                  | Mt | Tc | Cbt |       |               | Au g/t             |  |  |  |     |
| 57             |       |      |                       |               |                       |           |     |         | 59.11-64.5 Fracturing & alt. minimal                                       | tr                     |                     |    |    |     |       |               |                    |  |  |  |     |
| 58             |       |      |                       |               |                       |           | 6   |         | 61.74-61.41 Brx. Fragments up to 2 cm, in cbt with minor qt. No sulphides. | tr                     | nil                 | 10 | 1  | 5   | 58    | 23            |                    |  |  |  |     |
| 59             | 3.05  | 2.98 | 97.7                  |               |                       |           |     |         | 64.5-66.93 Fract./stringers slightly increased.                            | tr                     |                     |    |    |     | 637   | <             |                    |  |  |  |     |
| 60             | 60.05 |      |                       |               |                       |           |     |         | 66.93-69.86 Comparatively unfractured & unaltered.                         | cbt                    |                     |    |    | 3   |       |               |                    |  |  |  |     |
| 61             |       |      |                       |               |                       |           | 7   |         | 69.86-72.89 Shattering and veinlets slightly increased.                    | 25/cbt                 | tr                  | 10 | 2  | +   |       |               |                    |  |  |  |     |
| 62             | 3.04  | 2.92 | 96.1                  |               |                       |           |     |         | 72.89-73.05 Massive brucite (?)                                            | 25/cbt                 |                     |    |    |     |       |               |                    |  |  |  |     |
| 63             | 63.09 |      |                       |               |                       |           |     |         |                                                                            | tr                     |                     |    |    |     |       |               |                    |  |  |  |     |
| 64             |       |      |                       |               |                       |           | 7   |         |                                                                            | tr                     |                     |    |    |     |       |               |                    |  |  |  |     |
| 65             | 3.05  | 2.97 | 98.0                  |               |                       |           |     |         |                                                                            | tr                     |                     | 10 | 2  | 5   |       |               |                    |  |  |  |     |
| 66             | 66.14 |      |                       |               |                       |           |     |         |                                                                            | tr                     |                     |    |    |     |       |               |                    |  |  |  |     |
| 67             |       |      |                       |               |                       |           | 7   |         |                                                                            | tr                     |                     | 10 | 2  | 3   |       |               |                    |  |  |  |     |
| 68             | 3.05  | 2.87 | 94.1                  |               |                       |           |     |         |                                                                            | tr                     |                     |    |    |     |       |               |                    |  |  |  |     |
| 69             | 69.19 |      |                       |               |                       |           |     |         |                                                                            | tr                     |                     |    |    |     |       |               |                    |  |  |  |     |
| 70             |       |      |                       |               |                       |           | 5   |         |                                                                            | tr                     |                     | 10 | 2  | 5   |       | 23            | <                  |  |  |  |     |
| 71             | 3.05  | 2.87 | 94.1                  |               |                       |           |     |         |                                                                            | tr                     |                     |    |    |     | 638   | <             |                    |  |  |  |     |
| 72             |       |      |                       |               |                       |           |     |         |                                                                            | tr                     |                     |    |    |     | 23    | <             |                    |  |  |  |     |
|                |       |      |                       |               |                       |           |     |         |                                                                            | tr                     |                     |    |    |     | 639   | <             |                    |  |  |  |     |





| DRILL INTERVAL | FROM  | TO   | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC   | ROCK TYPE (DESCRIPTION)                                                                                                                                                                       | ALTERATION and VEINING | MINERAL PERCENTAGES |    |    |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |    |    | LAB |  |  |
|----------------|-------|------|-----------------------|---------------|-----------------------|-----------|-----|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|----|----|----|-----|-------|---------------|--------------------|----|----|----|-----|--|--|
|                |       |      |                       |               |                       |           |     |           |                                                                                                                                                                                               |                        | Py                  | Pb | Mn | Qt | Fe | Cbt |       |               | As                 | Ag | Cu | Zn |     |  |  |
| 87             |       |      |                       |               |                       |           |     |           | 90.23-93.60 Diabase. Fx-mx, pyx ±50%, plag ±70%. opaque, yellowish white qt veins, 5%. Non-magn.                                                                                              | tr                     |                     |    | 5  | 3  | 10 | 10  | 23    |               |                    |    |    |    |     |  |  |
| 88             | 2.59  | 2.39 | 92.3                  |               |                       |           |     |           |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 654   | <             |                    |    |    |    |     |  |  |
| 89             | 02.15 |      |                       |               |                       |           |     |           | 93.60-95.69 Talcose serpentinite. Highly fractured, broken. Partly healed by seams of talc with lesser carbonate.                                                                             |                        |                     |    |    |    |    |     | 23    | 0.07          |                    |    |    |    |     |  |  |
| 90             | 2.14  | 1.90 | 88.8                  |               |                       |           |     |           |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 655   | <             |                    |    |    |    |     |  |  |
| 91             | 91.29 |      |                       |               |                       |           |     | x         | 95.69-97.00 Finely crystalline greenstone. Non-magnetic; cut by a few talcose veinlets. Minor opaque, creamy qt. veining. Lower contact is at very small angle with core axis. See sketch:    |                        |                     |    |    |    |    |     | 23    | <             |                    |    |    |    |     |  |  |
| 92             |       |      |                       |               |                       |           |     | v diabase |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 656   | <             |                    |    |    |    |     |  |  |
| 93             | 2.28  | 0.98 | 43.0                  |               |                       |           |     | x         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 23    |               |                    |    |    |    |     |  |  |
| 94             | 92.57 |      |                       |               |                       |           |     | x         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 657   | <             |                    |    |    |    |     |  |  |
| 95             | 2.59  | 2.04 | 78.8                  |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 23    |               |                    |    |    |    |     |  |  |
| 96             | 96.16 |      |                       |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 658   | 0.07          |                    |    |    |    |     |  |  |
| 97             | 1.38  | 1.32 | 95.7                  |               |                       |           |     | S         | 97.00-99.37 Diabase. Mx. Opaque white qt. veins and segregations common.                                                                                                                      |                        |                     | 1  |    |    | 10 | 5   | 23    | <             |                    |    |    |    |     |  |  |
| 98             | 97.54 |      |                       |               |                       |           |     | x diabase | 99.37-99.82 Greenish clay fault gouge. A nail can be pushed through core by hand. Lower 15cm, gouge gives way to fragments serp. in soft green talcose matrix. Lower contact ≈ 25° corr axis. |                        |                     |    |    |    |    |     | 23    | <             |                    |    |    |    |     |  |  |
| 99             | 2.13  | 1.63 | 76.5                  |               |                       |           |     | x         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 659   | <             |                    |    |    |    |     |  |  |
| 100            | 99.67 |      |                       |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 23    | <             |                    |    |    |    |     |  |  |
| 01             | 3.05  | 2.73 | 89.5                  |               |                       |           |     | S         | 99.82-100.83 Serpentinite. Highly altered; shattered and heated by veinlets talc + carbonate. Mottled with pale creamy green (brucite?). Moderately magnetic.                                 |                        |                     |    |    |    |    |     | 660   | <             |                    |    |    |    |     |  |  |
| 02             |       |      |                       |               |                       |           |     | S         | 100.49-101.68 Dike? 10% Slicks biotite in vfx felsic groundmass. Looks black with naked eye. Oxid. with fragments up to 3cm in                                                                |                        |                     |    |    |    |    |     | 23    | 0.14          |                    |    |    |    |     |  |  |
|                |       |      |                       |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 661   | <             |                    |    |    |    |     |  |  |
|                |       |      |                       |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 99.37 | 23            | <                  |    |    |    |     |  |  |
|                |       |      |                       |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 92.82 | 23            |                    |    |    |    |     |  |  |
|                |       |      |                       |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 101   | 23            | 0.07               |    |    |    |     |  |  |
|                |       |      |                       |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 662   | <             |                    |    |    |    |     |  |  |
|                |       |      |                       |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 663   | 0.14          |                    |    |    |    |     |  |  |
|                |       |      |                       |               |                       |           |     | S         |                                                                                                                                                                                               |                        |                     |    |    |    |    |     | 664   | 0.07          |                    |    |    |    |     |  |  |

| DRILL INTERVAL | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD    | GRAPHIC | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                               | ALTERATION and VEINING | MINERAL PERCENTAGES |    |    |    |    |     | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |    | LAB |
|----------------|-----------------------|---------------|-----------------------|-----------|--------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----|----|----|----|-----|-------|---------------|--------------------|----|----|-----|
|                |                       |               |                       |           |        |         |                                                                                                                                                                                                                                                                       |                        | Py                  | Po | Mt | Qt | Tc | Cst |       |               | Au                 | Ag | Cu |     |
| 102            |                       |               |                       |           |        |         | 99.82-103.03 cont:                                                                                                                                                                                                                                                    |                        |                     |    |    |    |    |     | 102   | 23            |                    |    |    |     |
| 103            | 102.72                |               |                       | ΔΔΔ       |        | S       | greenish, clay gouge.                                                                                                                                                                                                                                                 | tc                     |                     |    |    |    |    |     | 103   | 665           | 0.07               |    |    |     |
| 104            | 3.05                  | 2.94          | 96.4                  | ΔΔΔ       | rubble | S       | 103.28-103.83 Talc breccia, along contact betw. serps & dike rock desc. above. Contact ± 11 core axis. Half of core is fragments serps. & cbt. in white talc cement. Other half is fragments of dike rock in grey gouge. Contact marked by 1/2 cm. vein grayish talc. | tc cbt                 | tr                  | tr | 5  | /  | 10 | 10  | 103   | 23            |                    |    |    |     |
| 105            |                       |               |                       | ΔΔ        |        | S       | 103.83-109.17 Moderately altered serpentinite. Strongly magnetic. A few talc-cbt seams. Locally spotted; spots are 2-4 mm specks. cbt ± talc.                                                                                                                         |                        |                     |    |    |    |    |     | 104   | 666           | 0.07               |    |    |     |
| 106            | 105.77                | 0.91          | 0.61                  | ~~~~~     | rubble | S       | 106.2-109 Sp broken and rubble. Fracture surfaces coated with talc, locally cbt.                                                                                                                                                                                      | tc-cbt                 |                     |    |    |    | 5  | 5   | 105   | 23            |                    |    |    |     |
| 107            | 106.68                | 1.52          | 1.17                  | ~~~~~     | rubble | S       | 109.17-117.87 Moderately altered serps. Mottled black and bluish green. Probably contains some brachi. Cut by numerous cbt veinlets, with some associated talc. Veinlets may contain some gt.                                                                         | tc cbt                 | tr                  |    |    |    |    |     | 106   | 667           | 0.17               |    |    |     |
| 108            | 108.20                | 0.77          | 0.64                  | ~~~~~     | rubble | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 107   | 23            |                    |    |    |     |
| 109            | 108.97                |               |                       | ~~~~~     |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 108   | 668           | 0.17               |    |    |     |
| 110            |                       | 2.89          | 2.75                  |           | 4      | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 109   | 23            |                    |    |    |     |
| 111            |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 110   | 669           | 0.17               |    |    |     |
| 112            | 111.86                |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 107   | 23            |                    |    |    |     |
| 113            |                       | 3.05          | 2.84                  |           | 8      | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 108   | 670           | 0.14               |    |    |     |
| 114            |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 109   | 23            |                    |    |    |     |
| 115            | 114.91                |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 111   | 671           | <                  |    |    |     |
| 116            |                       | 3.05          | 2.86                  |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 112   | 23            |                    |    |    |     |
| 117            |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 113   | 672           | 0.07               |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 114   | 23            |                    |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 115   | 673           | <                  |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 116   | 23            |                    |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 117   | 674           | <                  |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 112   | 23            |                    |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 113   | 675           | 0.10               |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 114   | 23            |                    |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 115   | 676           | 0.10               |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 116   | 23            |                    |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 117   | 677           | 0.14               |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 118   | 23            |                    |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 119   | 678           | 0.17               |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 120   | 23            |                    |    |    |     |
|                |                       |               |                       |           |        | S       |                                                                                                                                                                                                                                                                       |                        |                     |    |    |    |    |     | 121   | 679           | 0.10               |    |    |     |







DIAMOND DRILL HOLE

YJ 86-19





| DRILL INTERVAL | FROM  | TO   | RECOVERED CORE LENGTH | CORE RECOVERY | FOLIATION OR CLEAVAGE | STRUCTURE | ROD | GRAPHIC                          | ROCK TYPE (DESCRIPTION)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ALTERATION and VEINING | MINERAL PERCENTAGES |     |    |      |      | DEPTH | SAMPLE NUMBER | ASSAY GEOCHEMISTRY |    |       |    | LAB |    |
|----------------|-------|------|-----------------------|---------------|-----------------------|-----------|-----|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|-----|----|------|------|-------|---------------|--------------------|----|-------|----|-----|----|
|                |       |      |                       |               |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        | Py                  | Mt  | Qz | Tc   | Rms  |       |               | FA                 | Au | g/t   |    |     |    |
| 30             |       |      |                       |               |                       |           | 0   |                                  | zone which is itself serpentinite<br>is unalter serpentinite (frenolite?) frags.<br>within serpentinite & carb(s) spots<br>33.1-33.7 Carb(++) altn as vnlts<br>or more dominantly as spots which seem<br>restricted to almost vein structures < 2cm<br>wide<br>35.30 couple Mt olots < 2mm<br>- below 34.0m carb(+) fr. and altn<br>is ~ 1% brucite/brucite vnlts<br>- suggest fr. po; rare Py microvnlts<br>- lower CTC @ 50°                                                                                             |                        | 2.25                | 5.8 |    | 1    | 31.0 |       |               |                    |    |       |    | 30  |    |
| 31             |       | 30A  | 294                   | 97            |                       |           | 9   |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     | 4  |      |      |       |               |                    |    |       | 31 |     |    |
| 32             |       |      |                       |               |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     |    |      |      | 23699 | <             |                    |    |       | 32 |     |    |
| 33             | 32.61 |      |                       |               |                       |           | 7   |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     | 8  | 33.0 |      |       |               |                    |    |       | 33 |     |    |
| 34             |       | 2.4A | 235                   | 96            |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     | 9  |      |      |       |               |                    |    |       | 34 |     |    |
| 35             | 35.05 |      |                       |               |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     | 10 |      |      |       |               |                    |    |       | 35 |     |    |
| 36             |       | 1.37 | 109                   | 80            |                       |           | 11  |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     | 11 |      |      |       |               |                    |    |       | 36 |     |    |
| 37             |       | 2.29 | 229                   | 100           |                       |           | 5   |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     |    |      |      |       |               |                    |    |       | 37 |     |    |
| 38             |       |      |                       |               |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     |    |      |      |       |               |                    |    |       | 38 |     |    |
| 39             | 38.71 |      |                       |               |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     |    |      |      |       |               |                    |    |       | 39 |     |    |
| 40             |       | 2.44 | 231                   | 95            |                       |           | 4   | CTC @ 50°                        | 40.49-44.84 Diorite to Gabbro Intr.<br>G; non-magmatic; pale to med. green;<br><del>to</del> green fig matrix remainder is<br>Qz/carb(++) altn occurring as fig<br>disseminations and vnlts - creamy<br>qz/carb and late white Calcite vnlts<br>which are less abdt. upper 10cm<br>whitish, calcitic gouge<br>40.70-41.05 Bi rich unit & qz/carb<br>altn; Bi ~ 10-15%; fr at vdy<br>HPS yellowish; olive; Ganner??<br>broken at lower 15cm<br>- lower CTC chill zone 8cm wide, etc<br>@ 11PULSE, consumed host serpentinit |                        | Tr.                 | 30  | 10 | 39.5 |      |       |               |                    |    | 23700 | <  |     | 40 |
| 41             | 41.15 |      |                       |               |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     |    |      |      |       |               |                    |    |       |    | 41  |    |
| 42             |       |      |                       |               |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     |    |      |      |       |               |                    |    |       |    | 42  |    |
| 43             |       | 3.05 | 287                   | 94            |                       |           | 4   | DWEITH<br>Jo<br>GABBRIC<br>INTR. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     |    |      |      |       |               |                    |    |       |    | 43  |    |
| 44             | 44.20 |      |                       |               |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     |    |      |      |       |               |                    |    |       |    | 44  |    |
| 45             |       | 3.35 | 293                   | 87            |                       |           |     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                     |     |    |      |      |       |               |                    |    |       | 45 |     |    |

UNIT SIMILAR to 901-127

















APPENDIX 6

GROUPING OF CLAIMS

For the purpose of filing assessment work, the claims covered by this report are grouped into two groups, referred to as the North Group and the South Group. The notices of grouping are attached for reference.

10-



Province of British Columbia  
Ministry of Energy, Mines and Petroleum Resources  
MINERAL RESOURCES BRANCH-TITLES DIVISION

SUB-RECORDER  
RECEIVED  
DEC 1 1986  
M.R. # 275853 & 660  
VANCOUVER, B.C.

MINERAL ACT

FORM 1

# NOTICE TO GROUP

Mining Division ARTLIN Location SPRUCE CR/SURPRISE C. AREA

Name of group NORTH Map No. 04/MW-12E

We, the undersigned owners\* of the following adjoining claims, desire to group them according to the provisions of the Mineral Act:-

| NAME OF CLAIM | No. of Units | Record No. | Month of Record | SIGNATURE OF OWNER* | Fed Miner Certificate No. |
|---------------|--------------|------------|-----------------|---------------------|---------------------------|
| HICENT I ✓    | 3            | 2090       | DEC             | HOMESTEAD           |                           |
| IP ✓          | 10           | 2483       | APR             | MINERAL             |                           |
| TOP I ✓       | 3            | 2480       | APR             | DEVELOPMENT         |                           |
| TOP II ✓      | 4            | 2481       | APR             | COMPANY             | 22195                     |
| WIND I ✓      | 2            | 2472       | FEB             |                     |                           |
| WIND II ✓     | 2            | 2473       | FEB             |                     |                           |
| JACK 9 FR ✓   | 1            | 2734       | AUG             |                     |                           |
| TUNIC ✓       | 2            | 2469       | FEB             |                     |                           |
| GIN ✓         | 3            | 2468       | JAN             |                     |                           |
| y.J. 9 ✓      | 1            | 2680       | JULY            |                     |                           |
| y.J. 10 ✓     | 1            | 2684       | JULY            |                     |                           |
| y.J. 17 FR ✓  | 1            | 2685       | JULY            |                     |                           |
| y.J. 7 ✓      | 20           | 2678       | JULY            |                     |                           |
| y.J. 8 ✓      | 20           | 2679       | JULY            |                     |                           |
| JACK 7 ✓      | 6            | 2724       | AUG             |                     |                           |
| JACK 10 FR ✓  | 1            | 2735       | AUG             |                     |                           |
| JACK 11 FR ✓  | 1            | 2736       | AUG             |                     |                           |
|               |              |            |                 | <i>[Signature]</i>  |                           |
|               |              |            |                 | J. Morrison         | 22195.6                   |

\* May be signed by agent on behalf of owner.




Province of British Columbia  
 Ministry of Energy, Mines and Petroleum Resources  
 MINERAL RESOURCES BRANCH-TITLES DIVISION

SUB-RECORDER  
 RECEIVED  
 DEC 1 1986  
 M.R. # 275862 & 975  
 VANCOUVER, B.C.

MINERAL ACT  
 FORM 1

NOTICE TO GROUP

Mining Division ATLIN Location SPRUCE CR. / SPRUCE C. AREA  
 Name of group SUNTEL Map No. 04N11W-12E  
 We, the undersigned owners\* of the following adjoining claims, desire to group them according to the provisions of the Mineral Act:-

| NAME OF CLAIM | No. of Units | Record No. | Month of Record | SIGNATURE OF OWNER*                                                                 | Free Miner Certificate No. |
|---------------|--------------|------------|-----------------|-------------------------------------------------------------------------------------|----------------------------|
| AGENT 2 ✓     | 3            | 2076       | DEC             |                                                                                     |                            |
| CUB FR ✓      | 1            | 2087       | DEC             | HOMESTAKE                                                                           |                            |
| WEDGE FR ✓    | 1            | 2088       | DEC             | MINERAL                                                                             |                            |
| DISCOVERY ✓   | 1            | 2089       | DEC             | DEVELOPMENT                                                                         |                            |
| RED 1 ✓       | 9            | 2182       | FEB             | COMPANY                                                                             | 221495                     |
| BEHMA ✓       | 20           | 2396       | AUG             |                                                                                     |                            |
| KIP ✓         | 9            | 2482       | MAR             |                                                                                     |                            |
| ZIP ✓         | 3            | 2479       | MAR             |                                                                                     |                            |
| CIR 11 ✓      | 20           | 2141       | FEB             |                                                                                     |                            |
| yj 6 ✓        | 9            | 2677       | AUG             |                                                                                     |                            |
| yj 18 FR ✓    | 1            | 2686       | AUG             |                                                                                     |                            |
| yj 19 FR ✓    | 1            | 2687       | AUG             |                                                                                     |                            |
| yj 21 FR ✓    | 1            | 2688       | AUG             |                                                                                     |                            |
| yj 22 FR ✓    | 1            | 2689       | AUG             |                                                                                     |                            |
| yj 23 FR ✓    | 1            | 2690       | AUG             |                                                                                     |                            |
| RED FR ✓      | 1            | 2758       | OCT             |                                                                                     |                            |
| JACK FR ✓     | 1            | 2732       | SEPT            |                                                                                     |                            |
| JACK 2 ✓      | 1            | 2720       | SEPT            |                                                                                     |                            |
| JACK 3 ✓      | 1            | 2721       | SEPT            |                                                                                     |                            |
| JACK 4 FR ✓   | 1            | 2708       | SEPT            |                                                                                     |                            |
| JACK 5 ✓      | 1            | 2722       | SEPT            |                                                                                     |                            |
| JACK 12 ✓     | 1            | 2737       | SEPT            |                                                                                     |                            |
| JACK 13 ✓     | 1            | 2738       | SEPT            |                                                                                     |                            |
| JACK 14 ✓     | 1            | 2739       | SEPT            |                                                                                     |                            |
| JACK 15 ✓     | 1            | 2740       | SEPT            |                                                                                     |                            |
| JACK 16 ✓     | 1            | 2741       | SEPT            |                                                                                     |                            |
| JACK 17 FR ✓  | 1            | 2742       | SEPT            |                                                                                     |                            |
| JACK 20 ✓     | 1            | 2744       | SEPT            |                                                                                     |                            |
|               |              |            |                 |  |                            |
|               |              |            |                 | JEFF MCEWEN                                                                         | 221496                     |
|               |              |            |                 | AGENT                                                                               |                            |

\* May be signed by agent on behalf of owner.



APPENDIX 7

ASSAY PROCEDURES

Mr. P. Ronning & Mr. R. Boyd  
Homestake Mining

June 16 1986

### Assay Procedures used on the Yellow Jacket Project

Dear Sir:

Contained in this letter are the assay procedures used on the above project. I will describe the full procedure from receiving the samples to reporting the results.

#### Sample Preparation:

- (a) When the samples are received they are given a report number.
- (b) The method of shipping is noted.
- (c) The samples are then sorted numerically or according to client shipment form if provided.
- (d) The whole sample is then put through a 6" jaw crusher.
- (e) The whole sample is then put through a 10" cone crusher. Which crushes down to 10 mesh.
- (f) Sample is then split down to approximately 250 grams and the excess material is placed back into original bag and the "250" gram split is placed into a paper bag.
- (g) The 250 gram split is pulverized to 90% -150 mesh.

#### Analyses: Fire Assay

The pulverized sample was then fire assayed for Au. The fire assay procedure was as follows;

- (a) The sample is weighed into a crucible with prepared flux. The flux, was appropriate weights of litharge, soda, silica, borax glass, and flour. liquid silver was added to all of the samples in a Au run.
- (b) Three samples out of every 24 are run again on another fusion at the end of a report. All samples over 0.20 OPT are run again as a check and weighed on the gold balance, as well as any sample whose results look suspect. (ie a high one amongst a series of low ones and vice versa)
- (c) The samples are fused at 1950 degrees F for about 40 minutes.
- (d) The slag is removed from the resulting lead button, which contains the Precious metals and weighs between 30 and 40 grams.
- (e) The lead button is then cupelled to get rid of the lead and the resulting bead is digested in a test tube and run on the A.A.



The above is a description of how your samples are routinely treated, below is a description of the screening procedure used on report 526-1561.

#### Metallics Screening Procedure

1. A 1000 gm sample was taken from the original reject.
2. The whole sample was pulverized and then passed through a 100 mesh screen.
3. The whole of the + 100 mesh material was fire assayed and 2 x 1AT of the -100 mesh material was fire assayed.
4. The total Au in the sample was then calculated.

I hope the description of the procedures is adequate for your needs.

Sincerely yours

R. K. Rogers  
Chief Assayer

APPENDIX 8  
COST STATEMENTS

Statement of Drill-Related Expenditures

Yellowjacket Project

April 1986 - October 1986

Salaries and Wages

|                           |                                                                                     |                   |   |           |           |
|---------------------------|-------------------------------------------------------------------------------------|-------------------|---|-----------|-----------|
| P. Ronning                | June 3,4,5<br>July 1 - 4, 7, 12<br>August 4,5, 18 - 31<br>Sept 1 - 30<br>Oct 1 - 24 |                   |   |           |           |
|                           | 79.0 days at                                                                        | 205.00            | = | 16,195.00 |           |
| M. Hiltz                  | Sept 9 - 30<br>Oct 1 - 19                                                           |                   |   |           |           |
|                           | 41.0 days at                                                                        | 85.00             | = | 3,485.00  |           |
| M. O'Donnell              | Aug 7 - 31 }<br>Sept 1 - 27 }<br>Oct 1 - 28 }                                       | 23.6<br>% of time |   |           |           |
|                           | 18.9 days at                                                                        | 115.00            | = | 2,171.20  |           |
| Len Havens                | Sept 3,4,5                                                                          |                   |   |           |           |
|                           | 3.0 days at                                                                         | 60.00             | = | 180.00    |           |
|                           | overhead & benefits at 20%                                                          |                   | = | 4,406.24  |           |
| Total Salaries & benefits |                                                                                     |                   |   |           | 26,437.44 |

Geological Consultant's Fees

|                                          |               |         |        |   |           |
|------------------------------------------|---------------|---------|--------|---|-----------|
| Jam Geological                           | March 28 - 30 |         |        |   |           |
|                                          | May 15 - 31   |         |        |   |           |
|                                          | June 1 - 17   |         |        |   |           |
|                                          | July 3 - 22   |         |        |   |           |
|                                          | Sept 5 - 8    |         |        |   |           |
|                                          | 16.5          | days at | 225.00 | = | 3,712.50  |
|                                          | 33.0          | days at | 300.00 | = | 9,900.00  |
|                                          | 2.0           | days at | 125.00 | = | 250.00    |
| truck                                    | 31.0          | days at | 50.00  | = | 1,550.00  |
| expenses (including 10% surcharge)       |               |         |        | = | 6,930.65  |
| (includes meals, lodging, air fares etc) |               |         |        |   |           |
| Total Geological Consultants             |               |         |        |   | 22,343.15 |

Miscellaneous Consultants

|                                 |  |  |  |  |          |
|---------------------------------|--|--|--|--|----------|
| Rescan Environmental Services   |  |  |  |  | 1,973.83 |
| Vancouver Petrographic          |  |  |  |  | 630.75   |
| J.W. Fisher                     |  |  |  |  | 562.20   |
| Total Miscellaneous Consultants |  |  |  |  | 3,166.78 |

Meals and Lodging (HMDC employees only)

|                                                                                                                     |  |  |  |  |          |
|---------------------------------------------------------------------------------------------------------------------|--|--|--|--|----------|
| (charge for meals and lodging is the sum from all individual expense accounts claims rather than a per diem charge) |  |  |  |  | 2,746.38 |
|---------------------------------------------------------------------------------------------------------------------|--|--|--|--|----------|

Diamond Drilling

|                       |                                                                                                                                     |            |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------|
| Connors Drilling Ltd. | Total Invoice Cost<br>(includes all drilling<br>field cost work<br>consumables and materials lost<br>mobilization & demobilization) | 241,357.92 |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------|

Bulldozing

Arctic Bulldozing

|                |          |        |   |           |
|----------------|----------|--------|---|-----------|
| May 15 - 20    |          |        |   |           |
| 41.0           | hours at | 145.00 | = | 5,945.00  |
| Aug 20 - Oct 3 |          |        |   |           |
| 147.5          | hours at | 145.00 | = | 21,387.50 |

|                  |           |
|------------------|-----------|
| Total Bulldozing | 27,332.50 |
|------------------|-----------|

Assaying

|                |       |          |      |   |          |
|----------------|-------|----------|------|---|----------|
| Au, Fire Assay | 904.0 | assay at | 8.50 | = | 7,684.00 |
|                | 904.0 | prep at  | 3.75 | = | 3,390.00 |

|                           |       |          |       |   |          |
|---------------------------|-------|----------|-------|---|----------|
| Au Metallics<br>Screening | 176.0 | assay at | 24.00 | = | 4,224.00 |
|                           | 176.0 | prep at  | 14.00 | = | 2,464.00 |

|                                 |      |          |       |   |          |
|---------------------------------|------|----------|-------|---|----------|
| Au, Cu, Pb, Zn<br>AS, Hg, W, Sb | 46.0 | assay at | 22.50 | = | 1,035.00 |
|---------------------------------|------|----------|-------|---|----------|

|            |        |        |      |   |          |
|------------|--------|--------|------|---|----------|
| Overweight | 5170.0 | lbs at | 0.40 | = | 2,068.00 |
|------------|--------|--------|------|---|----------|

|             |           |
|-------------|-----------|
| Total Assay | 20,865.00 |
|-------------|-----------|

Freight and Communications  
-----

Atlin Trucking      June 16, 17                      81.95  
                                 Sept 3 - Oct 20                      976.05

Canadian Freightways              June 20                      797.15

Misc. postage, courier, bus, telephone, etc.              1,071.08

                                 Total Freight and Communications                                      2,926.23

Vehicle  
-----

HMDC-owned truck      68.0      days at      50.00      =      3,400.00

                                 operating expense                                      500.00

                                 Total Vehicle                                                                      3,900.00

Drafting Services                                                                      910.00

Air and Bus Travel                                                                      2,210.12

TOTAL DRILL-RELATED EXPENDITURES                                      354,195.52



Statement of Expenditures  
 Geophysical Surveys and Line Cutting  
 Yellowjacket Project  
 April 1986 - October 1986

Line Cutting  
 -----

Eagle Head Exploration Services

March 31 - May 26  
 Aug 25 - Oct 14

|       |       |        |   |           |
|-------|-------|--------|---|-----------|
| 15.62 | km at | 250.00 | = | 3,905.00  |
| 44.90 | km at | 315.00 | = | 14,143.50 |
| 27.17 | km at | 350.00 | = | 9,507.75  |

|                    |  |           |
|--------------------|--|-----------|
| Total Line Cutting |  | 27,556.25 |
|--------------------|--|-----------|

Airborne Geophysics  
 -----

Aerodat Limited Aug 14 - Aug 17

|                 |        |       |       |   |           |
|-----------------|--------|-------|-------|---|-----------|
| Mag/VLF Survey  | 650.00 | km at | 55.00 | = | 35,750.00 |
| Calculated Grad | 650.00 | km at | 2.00  | = | 1,300.00  |

|                       |  |           |
|-----------------------|--|-----------|
| Total Airborne Survey |  | 37,050.00 |
|-----------------------|--|-----------|

|                             |  |           |
|-----------------------------|--|-----------|
| Amount Applicable to Claims |  | 19,033.85 |
|-----------------------------|--|-----------|

Consulting re Airborne Geophysics  
 -----

|              |  |        |
|--------------|--|--------|
| Geotest Inc. |  | 441.54 |
|--------------|--|--------|

Ground Geophysical Surveys

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Allan Scott, Geophysicist      Oct 9 - Oct 25

Magnetometer & VLF Survey

|                                            |       |                                 |        |   |           |
|--------------------------------------------|-------|---------------------------------|--------|---|-----------|
| Mag/VLF                                    | 75.30 | km at                           | 140.00 | = | 10,542.00 |
| VLF only                                   | 5.20  | km at                           | 85.00  | = | 442.00    |
|                                            |       | mobilization/demobilization     |        |   | 2,300.00  |
| Interpretation, Report & Data Presentation | 3.00  | days at                         | 300.00 | = | 900.00    |
|                                            |       | computer contouring & profiling |        |   | 1,512.00  |
|                                            |       | photocopying                    |        |   | 4.79      |

Induced Polarization Survey

|                                            |      |         |        |   |          |
|--------------------------------------------|------|---------|--------|---|----------|
| surveying                                  | 5.00 | days at | 920.00 | = | 4,600.00 |
| travel                                     | 1.00 | day at  | 650.00 | = | 650.00   |
| * extra labour                             | 6.50 | days at | 110.00 | = | 715.00   |
| Interpretation, Report & Data Presentation | 1.50 | days at | 300.00 | = | 450.00   |
|                                            |      | copying |        |   | 50.43    |

(\*S. Davies, D. Carr)

Total Ground Geophysical Surveys      22,166.22

Miscellaneous Maps and Publications

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848.64

Miscellaneous Field Supplies

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2,615.80

TOTAL GEOPHYSICAL SURVEYS AND LINE CUTTING      72,662.30

Allocation of Costs to Claims

(Costs are allocated on a pro-rata basis. In the case of drill costs, allocation is based on the number of meters drilled on each claim. In the case of line cutting and geophysical work, it is based on the number of line kilometers on each claim.)

| Claim Name            | Rec No. | Lot No. | Units | TOTAL<br>DRILLING | TOTAL<br>GEOPHYS | TOTAL<br>PHYSICAL |
|-----------------------|---------|---------|-------|-------------------|------------------|-------------------|
| Group 1 (North Group) |         |         |       |                   |                  |                   |
| Arent 1               | 2090    |         | 3     | 59184.14          | 2273.39          | 826.69            |
| Tip                   | 2483    |         | 10    | 57697.12          | 2437.31          | 2204.50           |
| Top I                 | 2480    |         | 3     | 0                 | 345.21           | 0                 |
| Top II                | 2481    |         | 4     | 0                 | 344.56           | 0                 |
| Wind I                | 2472    |         | 2     | 0                 | 177.48           | 0                 |
| Wind II               | 2473    |         | 2     | 0                 | 854.27           | 1102.25           |
| Jack 9 Fr             | 2734    |         | 1     | 0                 | 637.13           | 1102.25           |
| Tonic                 | 2469    |         | 2     | 0                 | 192.43           | 0                 |
| Gin                   | 2468    |         | 3     | 0                 | 384.21           | 0                 |
| YJ 9                  | 2680    |         | 1     | 0                 | 12.35            | 0                 |
| YJ 16                 | 2684    |         | 1     | 0                 | 9.10             | 0                 |
| YJ 17 Fr              | 2685    |         | 1     | 0                 | 27.95            | 0                 |
| YJ 7                  | 2678    |         | 20    | 0                 | 1625.92          | 0                 |
| YJ 8                  | 2679    |         | 20    | 0                 | 1958.78          | 0                 |
| Nanaimo               | 909     | 193     | 1     | 0                 | 871.14           | 0                 |
| Lucky Liverpool       | 910     | 194     | 1     | 0                 | 0                | 0                 |
| Paris Exhibition      | 911     | 195     | 1     | 0                 | 0                | 0                 |
| Unknown               | 912     | 196     | 1     | 0                 | 0                | 0                 |
| Nimrod                | 913     | 197     | 1     | 0                 | 0                | 0                 |
| Imperial              | 914     | 198     | 1     | 0                 | 0                | 0                 |
| Sultan Fr             | 915     | 199     | 1     | 0                 | 0                | 0                 |
| Transit Fr            | 916     | 200     | 1     | 0                 | 0                | 0                 |
| Princess Pat          | 917     | 4366    | 1     | 0                 | 0                | 0                 |
| Pilot                 | 918     | 4367    | 1     | 0                 | 0                | 0                 |
| R. A. F.              | 919     | 4368    | 1     | 0                 | 0                | 0                 |
| Observer              | 920     | 4369    | 1     | 0                 | 0                | 0                 |
| Jack 7                | 2724    |         | 6     | 0                 | 447.27           | 0                 |
| Leo 1 Fr              | 2329    |         | 1     | 0                 | 20.15            | 0                 |
| Leo 2 Fr              | 2330    |         | 1     | 0                 | 16.25            | 0                 |
| Jack 10 Fr            | 2735    |         | 1     | 0                 | 20.15            | 0                 |
| Jack 11 Fr            | 2736    |         | 1     | 0                 | 0                | 0                 |
| TOTAL UNITS           |         |         | 95    | 116881.25         | 12655.07         | 5235.69           |

| Claim Name            | Rec No. | Lot No. | Units | TOTAL<br>DRILLING | TOTAL<br>GEOPHYS | TOTAL<br>PHYSICAL |
|-----------------------|---------|---------|-------|-------------------|------------------|-------------------|
| Group 2 (South Group) |         |         |       |                   |                  |                   |
| Arent 2               | 2076    |         | 3     | 54306.43          | 2824.19          | 1653.38           |
| Cub Fr                | 2087    | 520     | 1     | 0                 | 14.30            | 0                 |
| Wedge Fr              | 2088    | 521     | 1     | 71999.57          | 684.36           | 275.56            |
| Discovery             | 2089    | 184     | 1     | 0                 | 421.28           | 551.13            |
| Ted 1                 | 2182    |         | 9     | 0                 | 4253.81          | 6062.38           |
| Ted Fr                | 2758    |         | 1     | 0                 | 19.50            | 0                 |
| Rip                   | 2482    |         | 9     | 0                 | 1127.63          | 826.69            |
| Zip                   | 2479    |         | 3     | 0                 | 1428.01          | 1928.94           |
| Cal 11                | 2141    |         | 20    | 19460.78          | 2793.54          | 1102.25           |
| Beama                 | 2346    |         | 20    | 91547.49          | 8588.08          | 7440.19           |
| YJ 18 Fr              | 2686    |         | 1     | 0                 | 689.11           | 0                 |
| YJ 19 Fr              | 2687    |         | 1     | 0                 | 747.62           | 0                 |
| YJ 21 Fr              | 2680    |         | 1     | 0                 | 238.59           | 0                 |
| YJ 22 Fr              | 2689    |         | 1     | 0                 | 18.85            | 0                 |
| YJ 23 Fr              |         |         | 1     | 0                 | 71.51            | 0                 |
| Jack Fr               | 2732    |         | 1     | 0                 | 549.04           | 826.69            |
| Jack 2                | 2720    |         | 1     | 0                 | 414.13           | 551.13            |
| Jack 3                | 2721    |         | 1     | 0                 | 365.37           | 551.13            |
| Jack 4 Fr             | 2708    |         | 1     | 0                 | 3.90             | 0                 |
| Jack 5                | 2722    |         | 1     | 0                 | 208.37           | 275.56            |
| Jack 12               | 2737    |         | 1     | 0                 | 13.00            | 0                 |
| Jack 13               | 2738    |         | 1     | 0                 | 11.05            | 0                 |
| Jack 14               | 2739    |         | 1     | 0                 | 53.31            | 0                 |
| Jack 15               | 2740    |         | 1     | 0                 | 0                | 0                 |
| Jack 16               | 2741    |         | 1     | 0                 | 13.00            | 0                 |
| Jack 17 Fr            | 2742    |         | 1     | 0                 | 11.70            | 0                 |
| Jack 20               | 2744    |         | 1     | 0                 | 0                | 0                 |
| YJ 6                  | 2677    |         | 9     | 0                 | 420.62           | 0                 |
| TOTAL UNITS           |         |         | 94    | 237314.27         | 25983.91         | 22045.00          |

| Claim Name | Rec No. | Lot No. | Units | TOTAL<br>DRILLING | TOTAL<br>GEOPHYS | TOTAL<br>PHYSICAL |
|------------|---------|---------|-------|-------------------|------------------|-------------------|
|------------|---------|---------|-------|-------------------|------------------|-------------------|

Group 3 (West Group)

|        |      |  |    |   |         |        |
|--------|------|--|----|---|---------|--------|
| Reef   | 2334 |  | 20 | 0 | 1743.27 | 275.56 |
| YJ 4   | 2675 |  | 16 | 0 | 241.84  | 0      |
| YJ 5   | 2676 |  | 20 | 0 | 1031.07 | 0      |
| Balsam | 2318 |  | 16 | 0 | 0       | 0      |

|             |  |  |    |   |         |        |
|-------------|--|--|----|---|---------|--------|
| TOTAL UNITS |  |  | 72 | 0 | 3016.18 | 275.56 |
|-------------|--|--|----|---|---------|--------|

Group 4 (Lake Group)

|            |      |     |    |   |         |   |
|------------|------|-----|----|---|---------|---|
| Jack 6     | 2723 |     | 3  | 0 | 691.83  | 0 |
| YJ 12      | 2681 |     | 9  | 0 | 418.02  | 0 |
| YJ 13      | 2682 |     | 20 | 0 | 1533.60 | 0 |
| YJ 14      | 2683 |     | 3  | 0 | 137.17  | 0 |
| Jack 21 Fr | 2745 |     | 1  | 0 | 26.00   | 0 |
| Jack 27    | 2748 |     | 9  | 0 | 32.51   | 0 |
| Jack 28    | 2749 |     | 9  | 0 | 0       | 0 |
| Jack 30A   | 2753 |     | 1  | 0 | 64.36   | 0 |
| Jack 30B   | 2754 |     | 1  | 0 | 81.91   | 0 |
|            |      | 252 | 1  | 0 | 42.26   | 0 |
|            |      | 721 | 1  | 0 | 74.76   | 0 |

|             |  |  |    |   |         |   |
|-------------|--|--|----|---|---------|---|
| TOTAL UNITS |  |  | 58 | 0 | 3102.43 | 0 |
|-------------|--|--|----|---|---------|---|

Group 5 (Reserve Group)

|            |      |     |   |   |        |   |
|------------|------|-----|---|---|--------|---|
| Jack 29    | 2750 |     | 6 | 0 | 262.64 | 0 |
| Jack 31 Fr | 2752 |     | 1 | 0 | 0      | 0 |
| Gnat Fr    | 2706 | 378 | 1 | 0 | 42.91  | 0 |
| Gibb Fr    | 2707 | 210 | 1 | 0 | 42.91  | 0 |

|             |  |  |   |   |        |   |
|-------------|--|--|---|---|--------|---|
| TOTAL UNITS |  |  | 9 | 0 | 348.46 | 0 |
|-------------|--|--|---|---|--------|---|

| Claim Name           | Rec No. | Lot No. | Units | TOTAL<br>DRILLING | TOTAL<br>GEOPHYS | TOTAL<br>PHYSICAL |
|----------------------|---------|---------|-------|-------------------|------------------|-------------------|
| Group 6 (East Group) |         |         |       |                   |                  |                   |
| YJ 1                 |         |         | 12    |                   |                  |                   |
| YJ 2                 |         |         | 12    |                   |                  |                   |
| YJ 3                 |         |         | 20    |                   |                  |                   |
| Jack 22              | 2746    |         | 1     |                   |                  |                   |
| Jack 24              | 2747    |         | 1     |                   |                  |                   |
| TOTAL UNITS          |         |         | 46    | 0                 | 0                | 0                 |
| Claims Not Grouped   |         |         |       |                   |                  |                   |
| Jack 8               | 2733    |         | 20    |                   |                  |                   |
| Jack 33 Fr           |         |         | 1     |                   |                  |                   |
| YJ 24                |         |         | 1     |                   |                  |                   |
| TOTAL UNITS          |         |         | 396   | 354195.52         | 45106.05         | 27556.25          |


## STATEMENT OF QUALIFICATIONS

I, Peter A. Ronning, of Apt. 36, 1434 Davie Street, Vancouver, B.C., Canada, hereby certify that:

1. I am a graduate of the University of British Columbia, having been granted the degree of Bachelor of Applied Science in Geological Engineering in 1973.
2. I am a graduate of Queen's University, Kingston, Ontario, having been granted the degree of Master of Science in an applied science program in mineral exploration, in 1983.
3. I am a Fellow of the Geological Association of Canada.
4. I have practiced my profession as a geologist in mineral exploration since 1973.
5. At present I am employed as a geologist with Homestake Mineral Development Company of #640 - 1380 Burrard Street, Vancouver, British Columbia.
6. The work described in the accompanying report, entitled "Summary Report, Diamond drilling and Geophysical Work, Arent 1 and Arent 2, Beama and Adjacent Claims, North and South Claim Groups, Yellowjacket Property, Atlin Mining Division" and dated December 1986, was done under my supervision and with my participation.
7. I am the author of the report described above, with the exception of certain of the appendices.
8. I have no direct or indirect financial interest in any companies known by me to have an interest in the mineral properties described by this report, nor do I expect to receive any such interest.

DATED at Vancouver, B.C. this 16<sup>th</sup> day of January, 1987.

Respectfully submitted,

  
Peter A. Ronning