

YELLOWJACKET

889842

YBS  
Mar. 14/87

FAME

SUMMARY REPORT  
DIAMOND DRILLING AND GEOPHYSICAL WORK  
ARENT 1, AARENT 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

OWNER: HOMESTAKE MINERAL DEVELOPMENT COMPANY

OPERATOR: HOMESTAKE MINERAL DEVELOPMENT COMPANY

BY: PETER A. RONNING

DATE: DECEMBER 1986

5. SUMMARY AND RECOMMENDATIONS

The Yellowjacket Property and vicinity, on Pine Creek, are underlain by Permian and Pennsylvanian greenstones and related sediments, intruded by serpentized 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.

## 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:

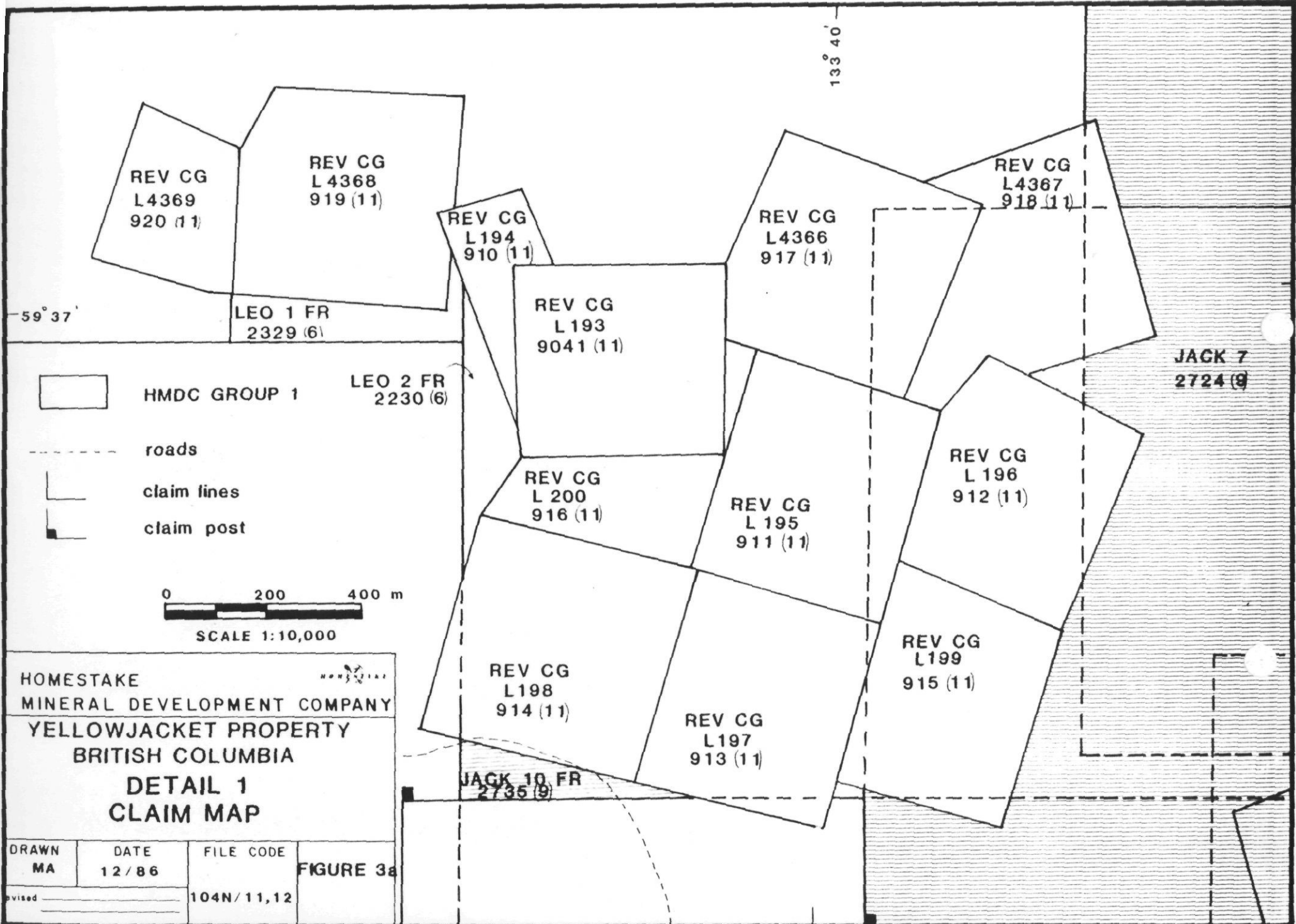
Several quartz veins carrying free gold were located along the course of Pine Creek in 1899 by placer miners. The Nimrod Syndicate tied up the discoveries and shallow shafts were sunk on the Yellowjacket showing (B.C. Dept. Mines Annual Reports; 1902, p. 984; 1903, p. H38; 1904 p. H44; and 1933, p. A78-A79), 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.



REV CG  
L4369  
920 (11)

REV CG  
L4368  
919 (11)

REV CG  
L194  
910 (11)

REV CG  
L4366  
917 (11)

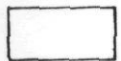
REV CG  
L4367  
918 (11)

59° 37'

LEO 1 FR  
2329 (6)

REV CG  
L193  
9041 (11)

JACK 7  
2724 (9)



HMDC GROUP 1

LEO 2 FR  
2230 (6)



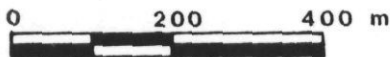
roads



claim lines



claim post



SCALE 1:10,000

HOMESTAKE  
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY  
BRITISH COLUMBIA

DETAIL 1  
CLAIM MAP

DRAWN  
MA

DATE  
12/86

FILE CODE

FIGURE 3a

104N/11,12

JACK 10 FR  
2735 (9)

REV CG  
L198  
914 (11)

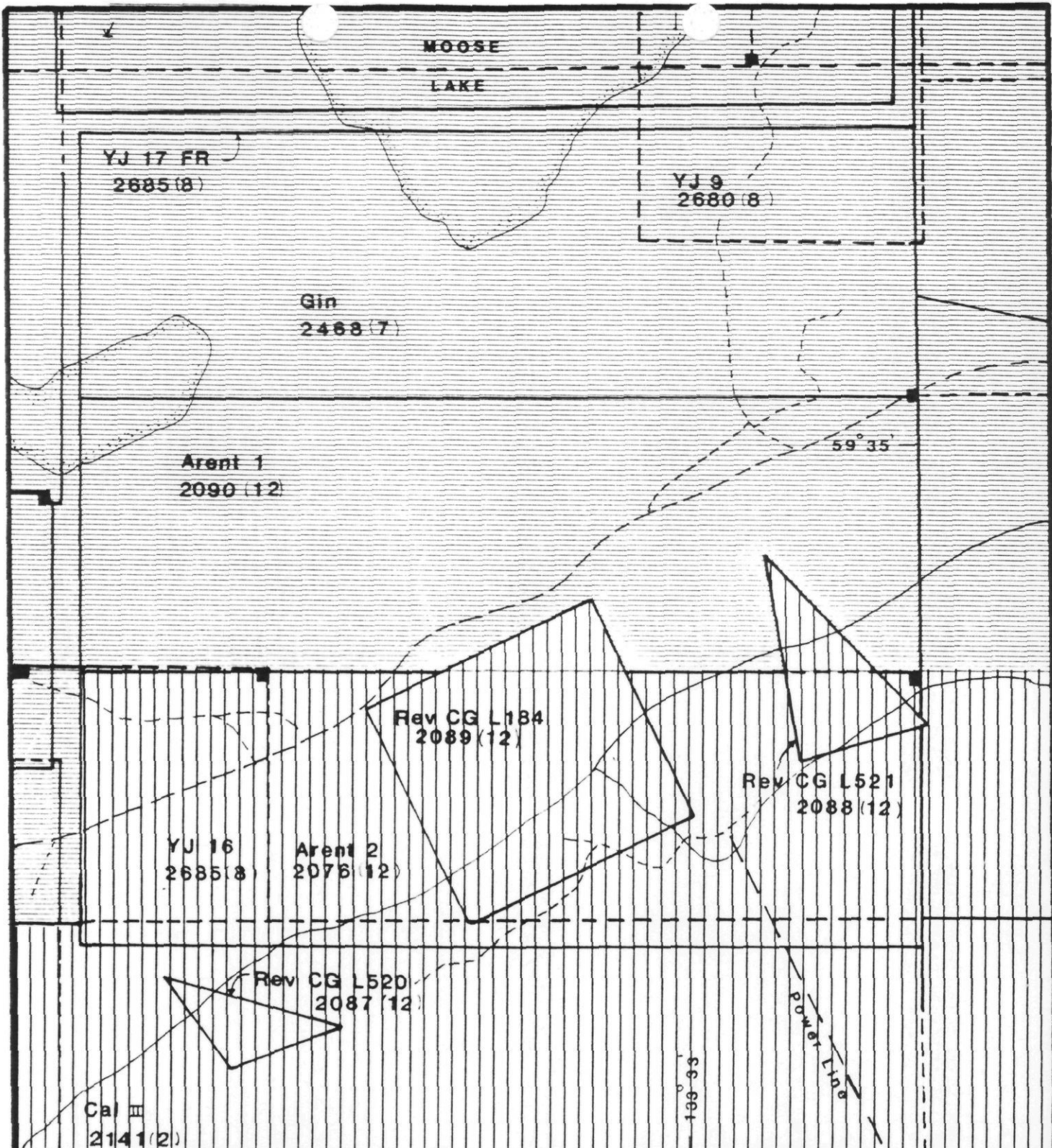
REV CG  
L197  
913 (11)







REV CG  
L195  
911 (11)

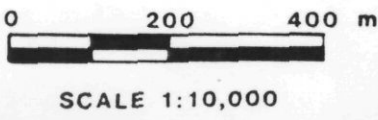
REV CG  
L196  
912 (11)

REV CG  
L199  
915 (11)

133 40'



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



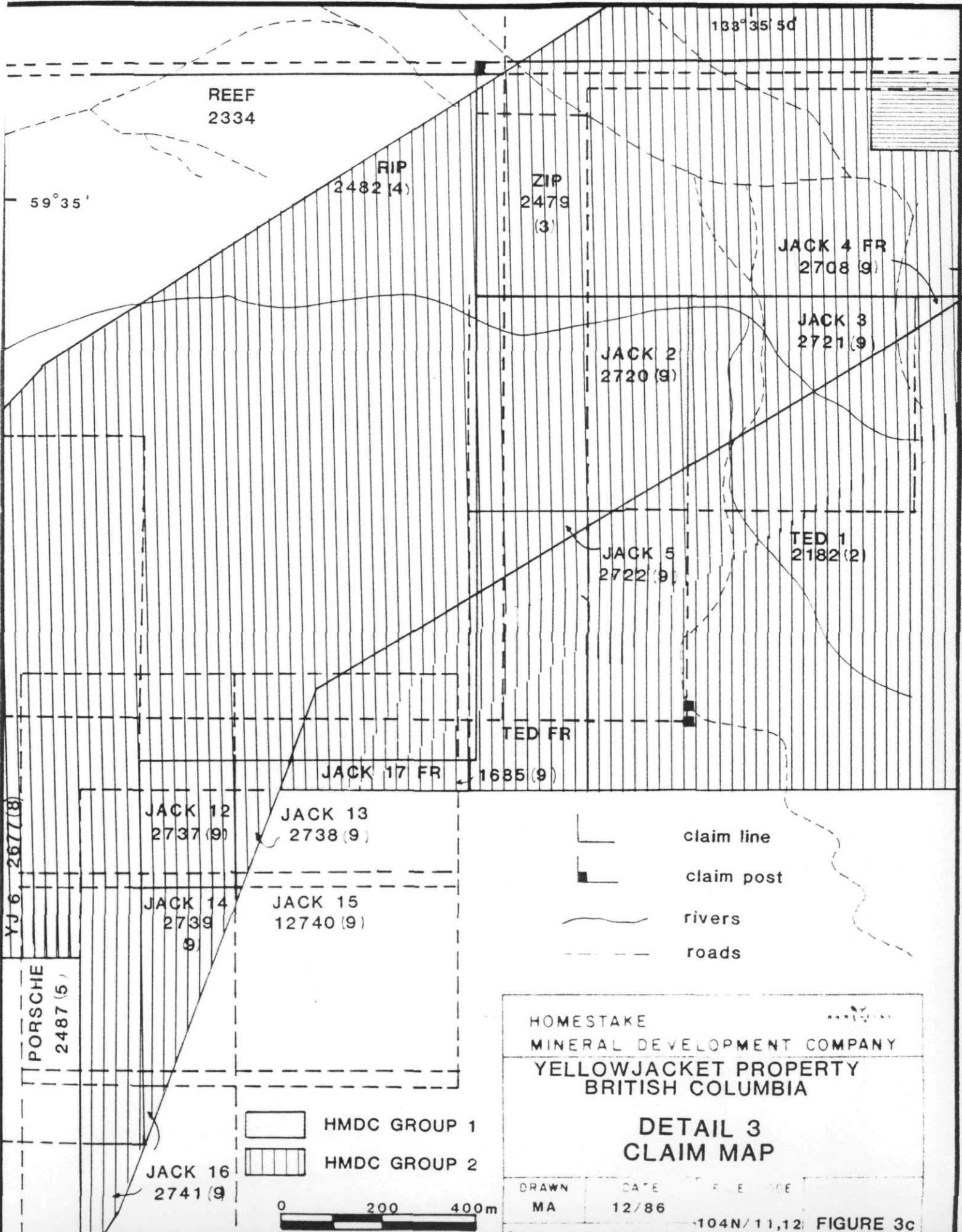
HOMESTAKE  
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY  
BRITISH COLUMBIA

**DETAIL 2  
CLAIM MAP**

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





133°35'50"

REEF  
2334

RIP  
2482 (4)

ZIP  
2479  
(3)

JACK 4 FR  
2708 (9)

JACK 3  
2721 (9)

JACK 2  
2720 (9)

TED 1  
2182 (2)

JACK 5  
2722 (9)

TED FR

JACK 17 FR 1685 (9)

JACK 12  
2737 (9)

JACK 13  
2738 (9)

JACK 14  
2739  
(9)

JACK 15  
12740 (9)

JACK 16  
2741 (9)

PORSCHE  
2487 (5)

59°35'

claim line

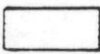

claim post

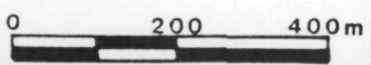
rivers

roads

HOMESTAKE  
MINERAL DEVELOPMENT COMPANY  
YELLOWJACKET PROPERTY  
BRITISH COLUMBIA

**DETAIL 3  
CLAIM MAP**

 HMDC GROUP 1  
 HMDC GROUP 2



DRAWN MA	DATE 12/86	FILE NO. 104N/11,12
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FIGURE 3c

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

## 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 Magnetics

##### 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 unserpentinized 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.

### 2.3 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. Date?

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

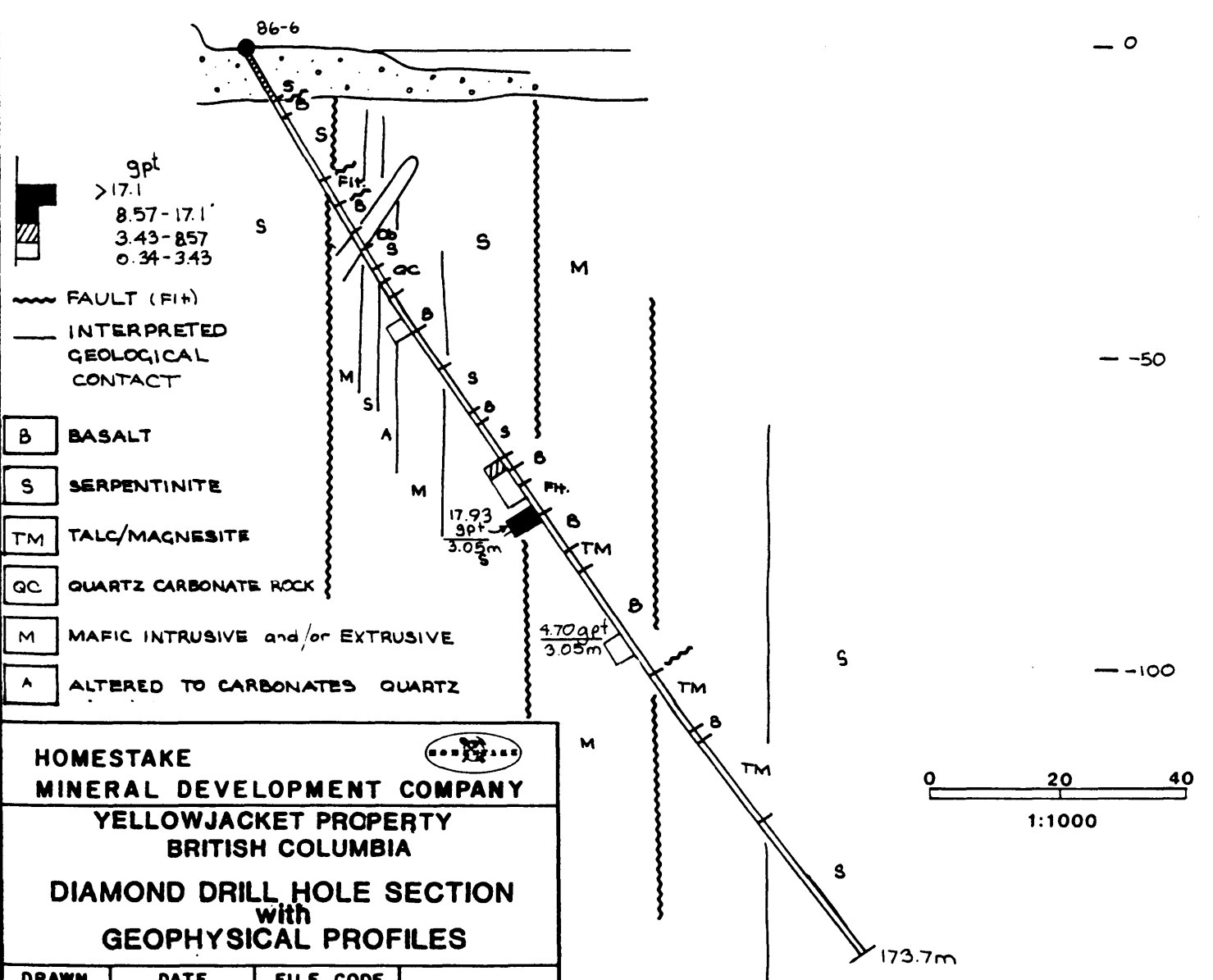
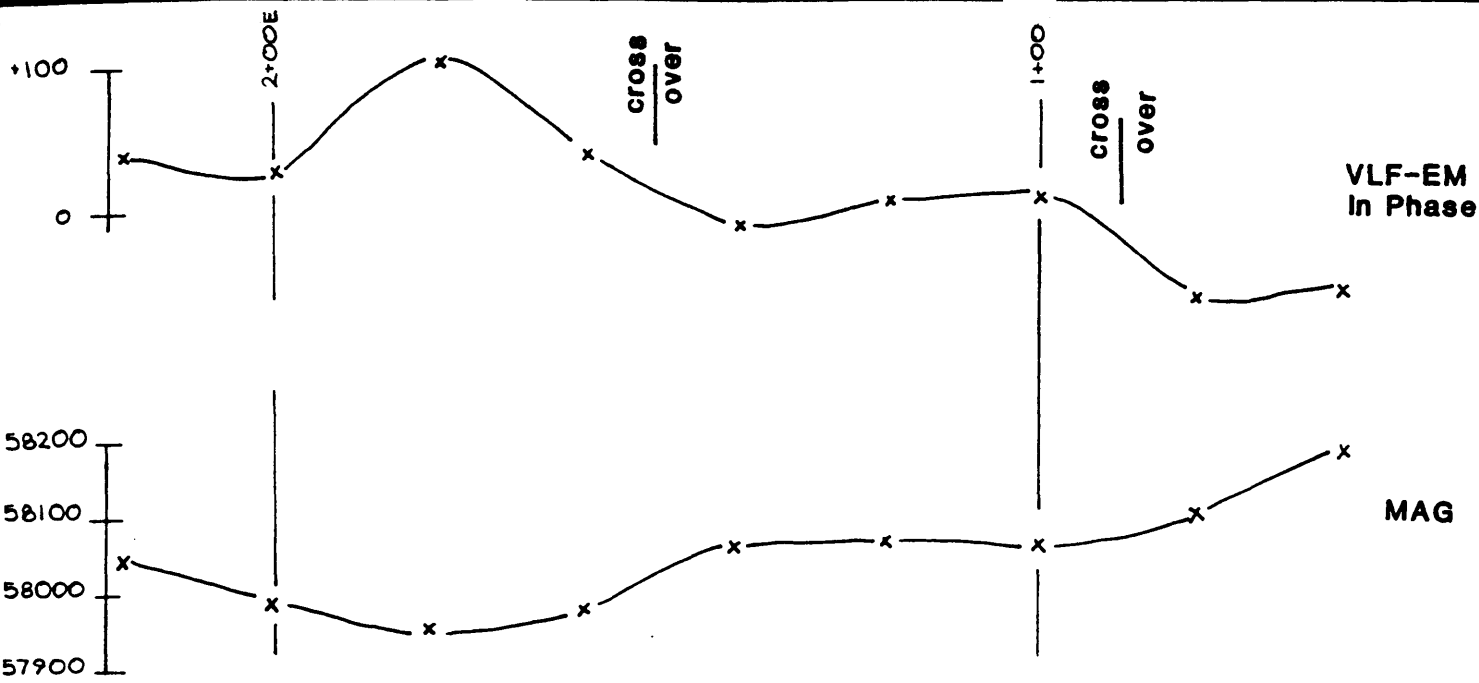
#### 4. METALLURGICAL ASSESSMENT

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.



- 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

YELLOW JACKET



# Newspaper accounts reveal history of Tri-Pacific's Atlin holdings

ATLIN, British Columbia—"Considerable activity in quartz mining has been the feature of the past week. Several sales were effected and perhaps the biggest was the bonding of the Yellow Jacket by Mr. Fetherstone (or Fetherstonehaugh) for the Lord Hamilton Co. This property which is situated on Pine Creek about a mile and a half above discovery claim, is believed by many to be the motherlode of Pine and Spruce."

That was the account on November 18, 1899, as it appeared in *The Atlin Claim* researched by Ted Yardley. Today, that property and the Rock of Ages area is being explored by Tri-Pacific Resources Ltd., formerly Tri-West Resources. Drilling of the Yellow Jacket and Rock of Ages areas, along with trenching of altered serpentinite zones where accessible and reconnaissance geology on the Ted I claim, are presently being carried out.

As with many early gold finds, especially the richest claims, disputes soon rose over ownership. The Yellow Jacket was no exception. On April 4, 1900, the newspaper reported, "Four protests were entered against Lord Hamilton's properties, the Yellow Jacket. The following protests have been recorded at the government office: Protest by C. Christopher that the Yellow Jacket overlaps the War Eagle Co.'s ground. Protest by Capt. Weare that his claim is overlapped by the Yellow Jacket. Protest by Mosteyn Williams that Yellow Jacket overlaps the Lost Atlantis ground. Note by Mr. McCauley disputing ownership of Yellow Jacket claim.

"The Yellow Jacket is property of Nimrod Syndicate situated one mile above Pine City which received so much attention the past winter. As many as eight men have been employed prospecting the ground the past five months, and some exceedingly fine ore was encountered. Now it will be seen by the protests above referred to, that there is considerable doubt about the ownership of the ground on which work was done. In the interest of the district, it is to be hoped a speedy solution may be reached on these conflicting claims. The music of the battery grinding out the golden returns is more appreciated than the chin music of the lawyers."

Ten days later the mill arrived. There was no doubt in Mr. Fetherstonehaugh's mind that it would go up in spite of the disputes. He is quoted as saying, "When I'm ready to put up the mill on the Yellow Jacket property, the mill will go up regardless of any adverse claims." And it did, too.

A half year later, on September 29, 1900, the Nimrod Syndicate gave up on the property. "As to the Yellow Jacket, there were so many claimants and the whole thing so inextricably mixed up, that after spending several thousands of dollars we decided to lose the money we had expended and get out of it altogether."

Captain Stretch is quoted as having reported, on December 22, 1900. "The Yellow Jacket claim is located about eight miles from Atlin on Pine Creek. Its close association with the bed of Pine Creek suggests it is one of the sources of placer gold. Many very fine gold specimens have been taken from this vein. A short distance southeast of Yellow Jacket we find undeveloped quartz outcrops in many respects resembling the quartz of the 'big vein' at the Engineer Group. These ore show but little, if any gold to the eye, but yield well in the horn spoon. My tests gave from \$20. to \$30. per ton in free gold, mostly fine."

The same day, a report in the newspaper said the Nimrod Syndicate's stamp mill was being moved to Munro Mountain.

Early opinions regarding the property were very favorable. "The property called the Yellow Jacket which was discovered in the bed of Pine Creek after the ground covering it had been washed off, has an excellent showing, but is presently in litigation" (May 18, 1901). Another report, on August 30, 1902, said "It looks as if the Rock of Ages on the Mother Lode will make a good paying mine. Special Commissioner Anderson accompanied by our editor looked over some of the ore at the mine, and carried off samples literally 'alive' with gold. Mr. Ruffner will commence work on the Yellow Jacket claim next week."

Two months later an account tells of both the Yellow Jacket and Rock of Ages, on October 25, 1902. "Over on Pine Creek placer miners stumbled upon the Yellow Jacket vein and in a 48 foot shaft that they sank on it, the pay averaged \$120 to the ton. This vein is free milling ore; so great were its values that quite naturally litigation resulted. The discoverers sold or bonded the property to a syndicate, trouble ensued, the original owners brought suit to recover the mine, and endless litigation seemed probable, tying up the mine, where recently Messrs. Ruffner and Banon bonded both sides of the lawsuit and will endeavour to proceed with development work.

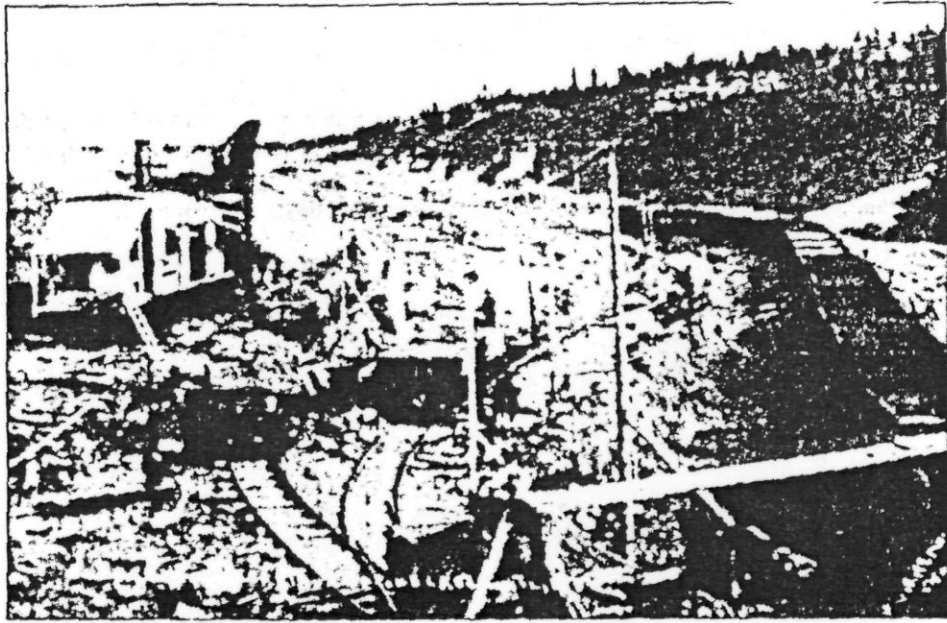
"Rock of Ages vein uncovered at Discovery, has made a good showing but is not thoroughly opened up. Specimens of this rock have assayed \$3,000 to the ton, but these are freaks. The ore which is free milling, averaged \$28. per ton as taken out of the 50-foot prospect hole that has been sunk on the vein by Mr. Ruffner."

The Yellow Jacket shaft was subsequently deepened to 85 feet during the winter of 1902-03. A five-stamp mill was built and five to 15 men were continuously employed for a few years.

Development work on the Yellow Jacket appears to have been discontinued in 1903-04 due to a combination of legal and developmental problems. Reportedly, more than 138,000 ounces of gold have been recovered from Pine Creek.

Currently under option to Canova Resources Ltd., the Yellow Jacket and Rock of Ages gold discoveries on Pine Creek are covered by three Crown grants and two mineral claims. Tri-Pacific may earn 37.5 percent of Canova's option by contributing 50 percent of the first C\$350,000 in exploration costs.

Phase II of exploration, to consist of a recommended 1,500 feet of NQ drilling and sampling and assaying, is estimated by J.E. Wallis, P.Eng., of Artic Engineering at C\$80,000. ✖



The Yellow Jacket headframe and five-stamp mill on Pine Creek, Atlin, British Columbia, can be seen in the center background of this photograph, taken in 1906. Tri-Pacific Resources is currently conducting a drill program in this and also the Rock of Ages areas. Provincial archives of British Columbia.