

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 89.02.01

ASSESSMENT REPORT 17295

MINING DIVISION: Atlin

PROPERTY: Yellowjacket
 LOCATION: LAT 59 35 46 LONG 133 32 48
 UTM 08 6607122 582048
 NTS 104N12E
 CLAIM(S): Arent 1, Beama
 OPERATOR(S): Homestake Min. Dev.
 AUTHOR(S): Marud, D.E.
 REPORT YEAR: 1988, 446 Pages
 COMMODITIES
 SEARCHED FOR: Gold
 GEOLOGICAL

SUMMARY: Permo-Pennsylvanian volcanic rocks of the Cache Creek Group are in fault contact with ultramafic rocks of the Permian Atlin Intrusions. The faulted contact is the site of hydrothermal alteration (silicification and carbonatization) of the volcanics and ultramafics. Locally good gold values are hosted by quartz veins adjacent to the contact.

WORK
 DONE: Drilling, Geochemical
 DIAD 1839.0 m 10 hole(s); HQ, NQ
 Map(s) - 19; Scale(s) - 1:1200, 1:1000
 SAMP 733 sample(s); AU

RELATED
 REPORTS: 15683, 15740
 MINFILE: 104N 043



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

VOLUME I OF III

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: DARCY E. MARUD
DATE: JANUARY 1988

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1. SUMMARY

The Yellowjacket Zone is underlain by a major fault zone trending 070°. The fault zone, which dips sub-vertically, has been activated numerous times. The resultant fracturing has formed a plumbing system for hydrothermal fluids which have produced quartz carbonate alteration of varying intensity.

Diamond drilling during the current calendar year intersected a number of significant mineralized zones with values as high as 15.01 g Au/tonne over a true width of 2.0 meters. Some of the mineralized zones carry visible gold as in the case of holes 23 and 24.

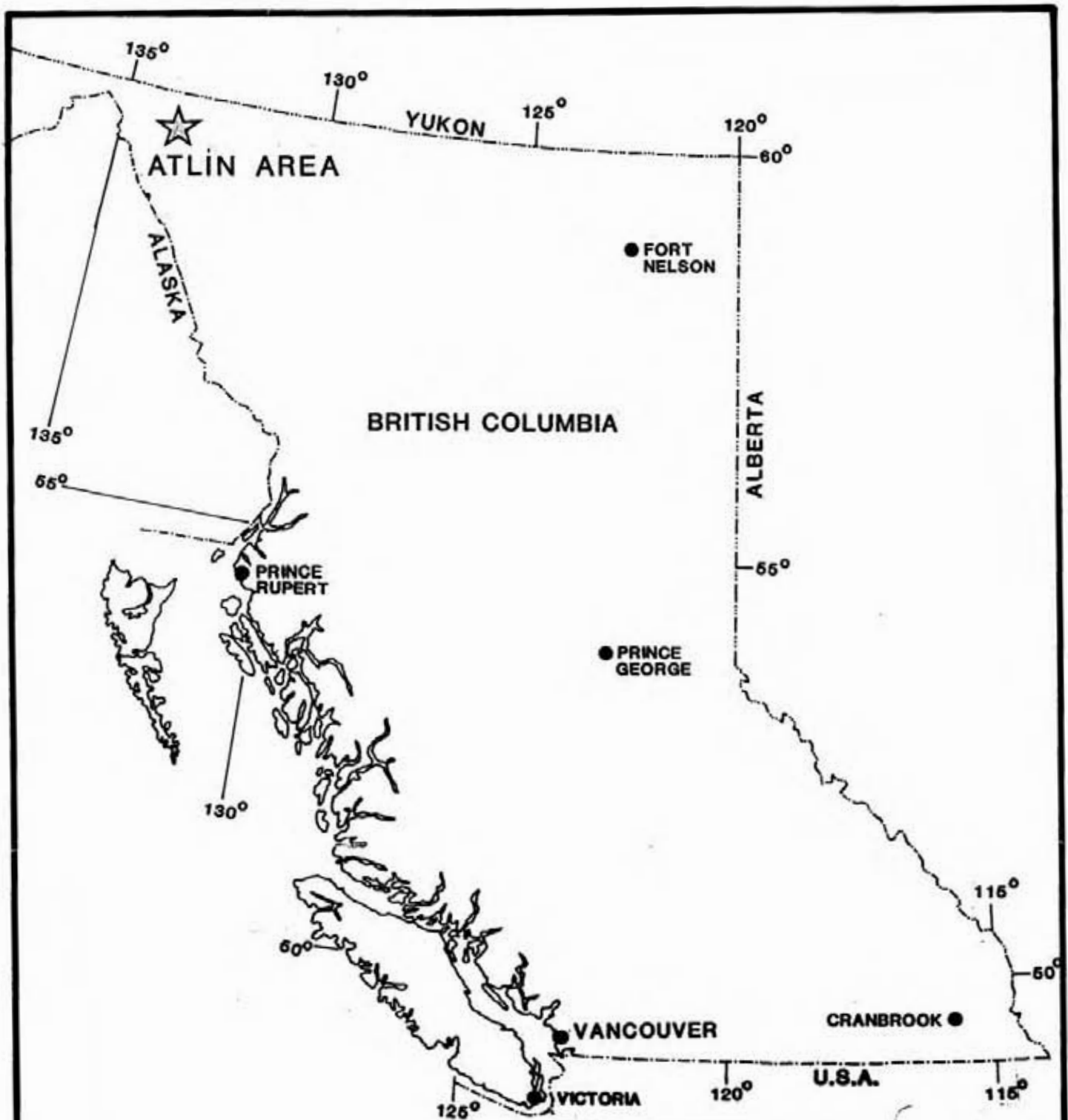
Although results of the diamond drilling have been encouraging, tracing the quartz veining and mineralization to depth has been a problem. Drill hole density below the 100 meter level, however, is inadequate and a raking ore shoot could conceivably remain untested.

The mineralized quartz-vein zones within the Yellowjacket Zone are irregular shaped bodies generally 4-8 meters wide. They often bifurcate, pinch and swell along strike and to depth (see Figures 7a,b and 8a-d). The main zone is approximately 250 meters in length; several other discontinuous zones trend obliquely to it. The unpredictable nature of such systems complicates the understanding of the geometry of the mineralized zone.

Further complicating the geometry of the mineralized zones is the presence of one or more cross-cutting structures. One such structure has been identified to date but others may be present. Movement along such features is unknown, but they undoubtedly truncate and displace the mineralized zone.

Along Pine Creek, the Yellowjacket structure has been delineated by geophysical interpretation for approximately 5 km. Only 10% of it has been tested by drilling. A reconnaissance drill program along the strike length of the Yellowjacket structure is recommended. Drill holes along associated parallel structures and cross structures are also advisable to determine their potential as hosts for similar gold systems. These programs should be conducted bearing in mind the following:

1. The Atlin Intrusions (Aitken, 1959) are in fault contact with the volcanics of the Cache Creek Group. The contact has been re-faulted several times. The resultant fault melange locally contains gold mineralization.
2. The presence of cross-cutting structures is only now beginning to be appreciated. Such features could be responsible for localizing mineralization and should be tested.
3. Veining and mineralization within the Yellowjacket Zone appear to be spatially related to lithological boundaries. The presence of both volcanics/dykes and serpentinite within an altered zone may be of significance.



HOMESTAKE MINERAL DEVELOPMENT COMPANY			
ATLIN PROJECTS BRITISH COLUMBIA			
LOCATION MAP			
DRAWN KMc	DATE 1/87	FILE CODE 104M/1012	map 1
Revised _____			

2. INTRODUCTION

2.1 Location

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.

2.2 Property Definition (Ronning, 1986)

Throughout this report, the term "Yellowjacket Property" is used to describe an area within the North and South claim groups, Figure 2. The term "Yellowjacket Zone" is used on a much more local scale to define an area within the Arent 1 and Arent 2 mineral claims, near the eastern end of their common boundary (see Figures 2 and 3). It lies on the Yellowjacket Grid between diamond drill holes 86-10 and 87-26. The zone does not outcrop or subcrop, therefore, geological information is obtainable only through surface drilling.

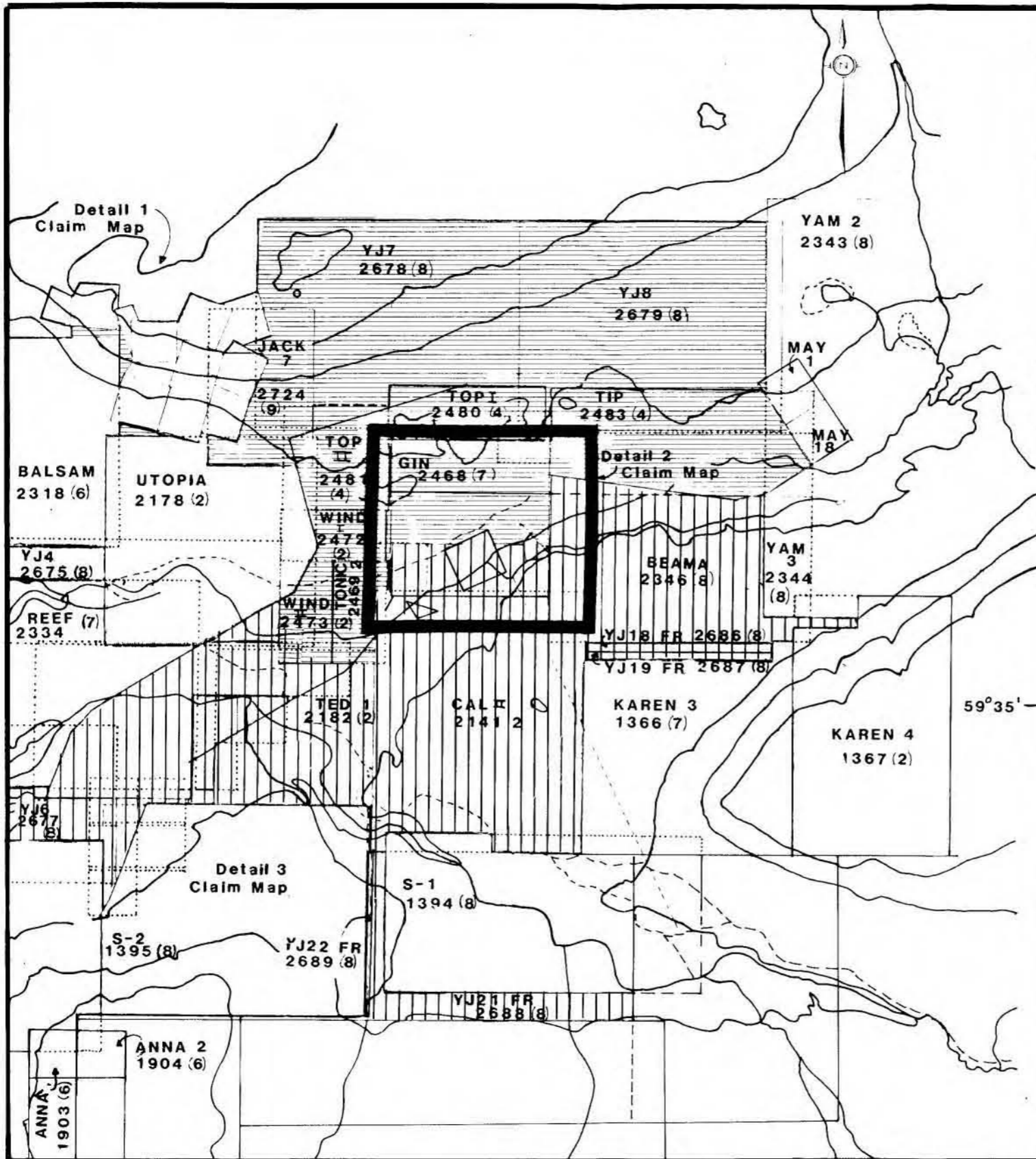
2.2.1. History of the Property




The first evidence of lode potential on the Yellowjacket Property was recognized in 1899 when several outcropping quartz veins carrying spectacular free gold were discovered along the course of Pine Creek by placer miners. The Nimrod Syndicate optioned the discovery claims from several individuals. Shallow shafts were reportedly sunk on the Yellowjacket prospect, the Rock of Ages prospect, and the Red Jacket prospect. Development work on the gold discoveries was discontinued in 1903 or 1904 due to a combination of legal and development problems. There was no appreciable production from these prospects although a five stamp mill was shipped to the property from England in 1901.

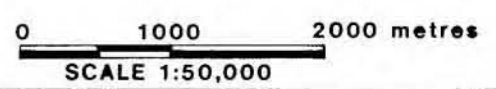
In the years that followed, all surface features related to the early lode mine development were obliterated by the hydraulic and dredge mining of gravels along Pine Creek. The exact locations of the original lode gold discoveries on Pine Creek are unknown.

Placer gold production from the gravels of Pine Creek and a tributary, Spruce Creek, has been significant, with recorded production of 138,144 ounces and 262,603 ounces, respectively. Actual production from these creeks is undoubtedly greater than reported.

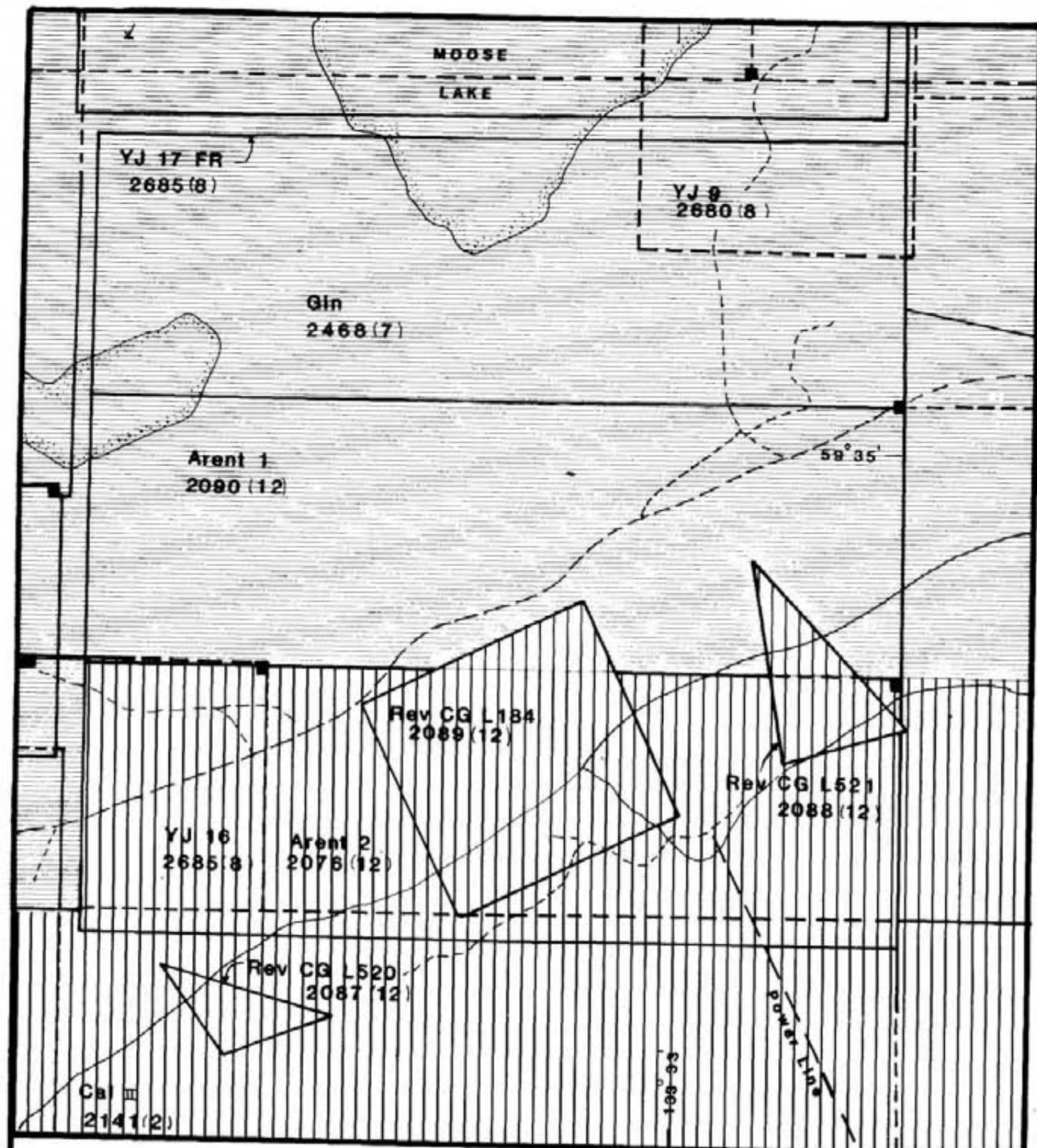
In 1983, local prospectors staked the area of the old discoveries. The claims were optioned to Canova Resources and Tri-Pacific Resources of Vancouver. These companies carried out programs of ground geophysics, diamond drilling and rotary drilling in 1984 and 1985. Homestake optioned the property in late 1985 and conducted significant exploration programs in 1986 and 1987.


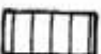


-  GROUP 1
-  GROUP 2
-  See following detailed sketch




HOMESTAKE MINERAL DEVELOPMENT COMPANY			
YELLOWJACKET PROPERTY BRITISH COLUMBIA			
CLAIM MAP			
DRAWN	DATE	FILE CODE	
	11/86	104N/11,12	FIGURE 2



---	roads		HMDC GROUP 1
~	ivers		HMDC GROUP
L	claim line		
■	claim post		

0 200 400 m
 SCALE 1:10,000


 HOMESTAKE
 MINERAL DEVELOPMENT COMPANY

**YELLOWJACKET PROPERTY
 BRITISH COLUMBIA**

**DETAIL
 CLAIM MAP**

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

2.2.2. Owner and Operator

The exploration described in this report was carried out during 1987 by Homestake Mineral Development Company under the terms of an option agreement with Canova Resources Ltd. and Tri-Pacific Resources Ltd. Homestake is the owner and operator of record.

2.3.3. Economic Potential

Lode gold mineralization is contained within thin quartz veins and veinlets and zones of silicification in altered serpentinites and andesites. High gold grades are frequently encountered but continuity of mineralized systems has been difficult to maintain. Much work remains to be done in order to evaluate the economic potential of the area.

2.3. Work Completed

2.3.1. Diamond Drilling

During the period February 1987 to July 1987, 15 diamond drill holes were completed for a total of 2,554 meters. Most of the core drilled was of HQ size (60 mm) but in some instances reducing to NQ (48 mm) was necessary. All drill core is stored within the townsite of Atlin, B.C. On a per claim basis, the drilling was distributed as follows:

Arent 1:	1,839 meters
Arent 2:	95 meters
Wedge Fr:	494 meters
Discovery:	126 meters

Total meterage for diamond drilling in 1986 and 1987 is 4,804 meters.

Table 1 is a summary of pertinent data for all 1987 drillholes.

TABLE 1

Hole No.	Easting m	Northing m	Azimuth Degrees	Dip Degrees	Start Date	Finish Date	Final Depth	Cumulative m's
YJ 87-20	13+60	-1+24	160	-60	12/02/87	16/02/87	145.40	145.40
YJ 87-21	14+40	-1+19	160	-58	16/02/87	21/02/87	148.70	294.10
YJ 87-22	15+20	-1+20	160	-58	21/02/87	26/02/87	148.43	442.83
YJ 87-23	12+80	-1+22.5	160	-59	27/02/87	04/03/87	143.87	586.67
YJ 87-24	14+00	-1+24	160	-60	04/03/87	08/03/87	144.78	731.48
YJ 87-25	13+20	-1+24	160	-60	09/03/87	11/03/87	145.40	876.88
YJ 87-26	12+30	-0+98	160	-60	12/03/87	18/03/87	187.80	1,064.68
YJ 87-27	13+35	-0+98	160	-60	19/03/87	25/03/87	182.90	1,247.58
YJ 87-28	14+50	-0+47	160	-54	30/05/87	04/06/87	255.12	1,502.70
YJ 87-29	13+80	-0+75	160	-51	19/05/87	23/05/87	199.95	1,702.65
YJ 87-30	15+90	-0+85	160	-53	24/05/87	30/05/87	200.25	1,902.90
YJ 87-31	13+00	-0+98	160	-60	04/06/87	10/06/87	202.69	2,105.59
YJ 87-32	12+50	-1+38	160	-48	10/06/87	13/06/87	99.67	2,205.26
YJ 87-33	10+90	-2+00	340	-50	13/06/87	15/06/87	125.88	2,331.14
YJ 87-34*	13+40	-0+20	160	-60	15/06/87	26/07/87	222.50	2,553.64
							TOTAL	2,553.64

* Abandoned before completion due to drilling difficulties.

2.3.2. Reverse Circulation Drilling

During early June, Homestake participated in a reverse circulation drilling program with Queenstake Resources, operators of a placer mine on part of the Yellowjacket property. Queenstake kept all samples acquired while drilling through overburden and placer gravels while Homestake acquired all bedrock samples. The samples were logged and then sent to Bondar Clegg and Co. in Whitehorse for preparation. Bondar Clegg in Vancouver did all assaying. No significant gold values were detected (see Figures 5a and 5b).

2.4 Regional Geological Setting (Ronning, 1986)

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.

3. RESULTS - GEOLOGY AND GEOCHEMISTRY

3.1 Lithologies

Nine distinct lithologies were logged in drill core. A short description of each will be given here. More detailed descriptions are given in the drill logs in Appendix 1.

Sectional views of each drill hole are included as figures 6a to 6o. Plan views are included as figures 7a and 7b.

Unit 1: Basalt

Rocks logged as basalts are found only in holes which intersect bedrock north of 1+00S. They form an easterly striking and subvertically dipping belt approximately 100 meters wide. The belt appears to be truncated or displaced at approximately 15+00E.

The basalts are generally dark green, weakly to strongly chloritized rocks. They are very fine to fine grained and massive. Original mineralogy consists of approximately 20% plagioclase with 80% pyroxene. Fracturing is ubiquitous with most fractures coated with dark green serpentine.

Unit 2: Serpentinite

Almost all holes throughout the Yellowjacket zone intersected some thickness of serpentinite. The rocks are usually completely serpentinitized. This is the result of alteration of ultramafic rocks such as pyroxenite and dunite.

The rocks are typically dark blue-grey to blue-green and massive. Usually they are moderately to strongly magnetic, due to the presence of up to 10% magnetite, but non-magnetic varieties are observed. Stringers, veinlets and spots of talc, calcite and carbonate are common.

Unit 3: Completely Altered

Most rocks within the Yellowjacket Zone display some alteration. However, some rocks are altered to the point where identification of original minerals and textures is impossible. Such rocks are said to be completely altered and are classified under unit 3. Although serpentinite is a completely altered rock, within the Yellowjacket Zone it is considered to be a separate rock type because of its abundance, unique character and early stage of alteration.

Alteration varies widely throughout the zone but carbonatization is the most common (see Figures 7 and 7b). This alteration results in the replacement of serpentine by magnesian dolomite and/or magnesite with lesser amounts of talc, tremolite and quartz. These rocks are typically light grey, light green or cream in colour and generally non-magnetic. 2-3% black "flecks" of chromite are regularly observed.

Pervasive silicification is not as common as carbonatization but is extensive enough to be noted. It is usually associated with abundant quartz veining, locally in volcanic rocks but more commonly in altered serpentinite. Silicification is usually accompanied by 2-3% fine grained pyrite in volcanic rocks and trace disseminated pyrite in altered serpentinite.

Other alteration minerals noted in the Yellowjacket Zone include calcite, sericite, chlorite, biotite and mariposite.

Unit 4: Mafic Intrusive Rocks

4a. Diabase:

Diabase dikes have been noted in most of the drill holes in the Yellowjacket Zone. They are typically a fine-grained mixture of pyroxene and plagioclase, sometimes exhibiting an ophitic texture. Alteration is variable but chlorite, carbonate, serpentine and leucoxene have all been noted.

4b. Gabbro:

Gabbro is encountered predominantly east of line 15+00E. It seems to occur as thin, wide, flat lying sills, often cut by numerous diabase dykes. Thickness of the units is estimated at 40 meters. The gabbro is medium to coarse-grained and relatively unaltered except for abundant thin unmineralized white quartz veins.

Unit 5: Feldspar Porphyry

Feldspar Porphyry has previously been noted in holes 9, 12 and 17. It was not intersected in drilling conducted during 1987.

Unit 6: Syenite

Syenite was identified in 1986 in holes 13 and 16 but was not intersected by any 1987 drill holes.

Unit 7: Diorite

Holes 21, 23 and 29 all intersected rocks that have been called diorites. The rocks are generally dark green with up to 40% white feldspar (plagioclase) phenocrysts and 60% chloritized? amphibole. They typically have a dioritic texture. In drill-holes they have also been noted to be enriched in hornblende in places and have been called hornblende andesites (9a).

Unit 8: Greenstone

This unit is used as a field term for any chloritized volcanic rock presumably ranging from andesite to basalt. It was only used where a more diagnostic description was not possible.

Unit 9: Andesite

Rocks logged as andesites are intersected south of 1+50S. They seem to form irregular shaped pods and lenses with their long axes striking 070°, parallel to the dominant shearing.

They are generally dark gray to green, fine grained volcanic rocks made up primarily of plagioclase feldspar with 10-15% quartz. Mafic minerals include hornblende, chlorite and biotite.

Two sub-units were recognized and classified on the basis of their predominant phenocrysts. These are 9a, Hornblende Andesite, and 9b, Plagioclase Andesite.

3.2 Structural Geology

The Yellowjacket Zone is interpreted as lying within a fault melange (Figures 7a and 7b). The rocks are strongly broken and have likely been subjected to several episodes of brittle fracturing and deformation. It is believed that most of this deformation was produced by movement along an east-northeast fault system following the Pine Creek valley and along associated cross faults.

Much of the fracturing has been healed by veins of various different mineralogies with calcite, iron and magnesium carbonates, talc and quartz being the most common. The veins often form complex stockworks with complex cross-cutting relationships. This makes vein paragenesis very difficult to unravel.

Following vein emplacement, reactivation of old fracture systems must have occurred. The latest and youngest fracturing did not heal, leaving the rocks shattered and broken.

Three known reactivated fault zones have been noted in the Yellowjacket Zone. Two fault zones, the North and South are evidenced by strong VLF conductors on surface and shattered gouge zones in drill core. Structural contouring of the gouge zones revealed the faults to be sub-vertical, striking 070° . Both faults are displaced between 15 and 35 meters between lines 14+00E and 15+00E. The displacement of the faults is apparently caused by a cross fault trending 110° and dipping approximately 50° to the southwest (see figure 7a and 7b). The dip of the cross-fault is interpreted from the best fit on vertical cross sections. The cross fault seems to displace the eastern extension of the mineralized zone some unknown distance.

3.3 Mineralization

In early 1987, the favoured interpretation of the Yellowjacket Zone was that mineralization existed in two east-northeast trending zones parallel to the main faults along Pine Creek. With further drilling, re-interpretation and surveying of drillhole collars, it is now apparent that one continuous zone of mineralization is present from 13+00E to 15+40E, where it may be truncated by the cross fault. The zone averages 5 to 10 meters in width, often bifurcating, pinching and swelling along strike and to depth. The strike is approximately 070° while the dip is subvertical. Several other small, discontinuous zones, up to 5 meters wide, occur throughout the Yellowjacket Zone. These trend obliquely to the main zone. The most prominent of these is a splay of the main zone extending through holes 87-24 and 86-6 at 050° (see figure 7a).

Within the mineralized zones, the mineralization is invariably coarse gold hosted in quartz veinlets. The veinlets are typically blue gray and generally less than 2 centimeters in thickness. Within the volcanic rocks, veining is accompanied by a thin one centimeter carbonate bleached envelope. This bleaching is not present adjacent to veins within altered serpentinite.

In many instances, the veining becomes frequent enough to form stockworks. These stockwork systems host the gold grades which approach sub-economic to economic widths of 3.0 grams Au/tonne or better. Some of the gold is visible and most is at least 150 microns in size.

Various sulfide minerals are found within the Yellowjacket Zone but they do not appear to be reliable mineralization guides. Pyrite is the predominant sulfide and may become more abundant adjacent to and within mineralized areas. In volcanic rocks where 1-2% euhedral pyrite is hosted within vein bleaching envelopes, economic gold grades are sometimes encountered. In some silicified andesites, however 1-2% euhedral pyrite is present with no gold. Hence, several different stages of pyritization are present. In general pyrite is present in only trace amounts.

Gersdorffite (NiAsS) and arsenopyrite have also been noted in Yellowjacket drill core. Both minerals account for the anomalous arsenic (As) values detected while gersdorffite is presumably host to most of the anomalous antimony (Sb). Occasionally arsenic and antimony enrichment do correlate with gold (see Figures 9a to 9o.s).

Other sulfide minerals noted in the Yellowjacket Zone include millerite (NiS), chalcopyrite and pyrrhotite. None of these are related to gold mineralization.

Mineralization tends to be focused near lithological contacts, predominantly between volcanic rocks and serpentinite. The contact zones are generally broken and fractured, due to competency contrast, creating ideal porosity for vein emplacement.

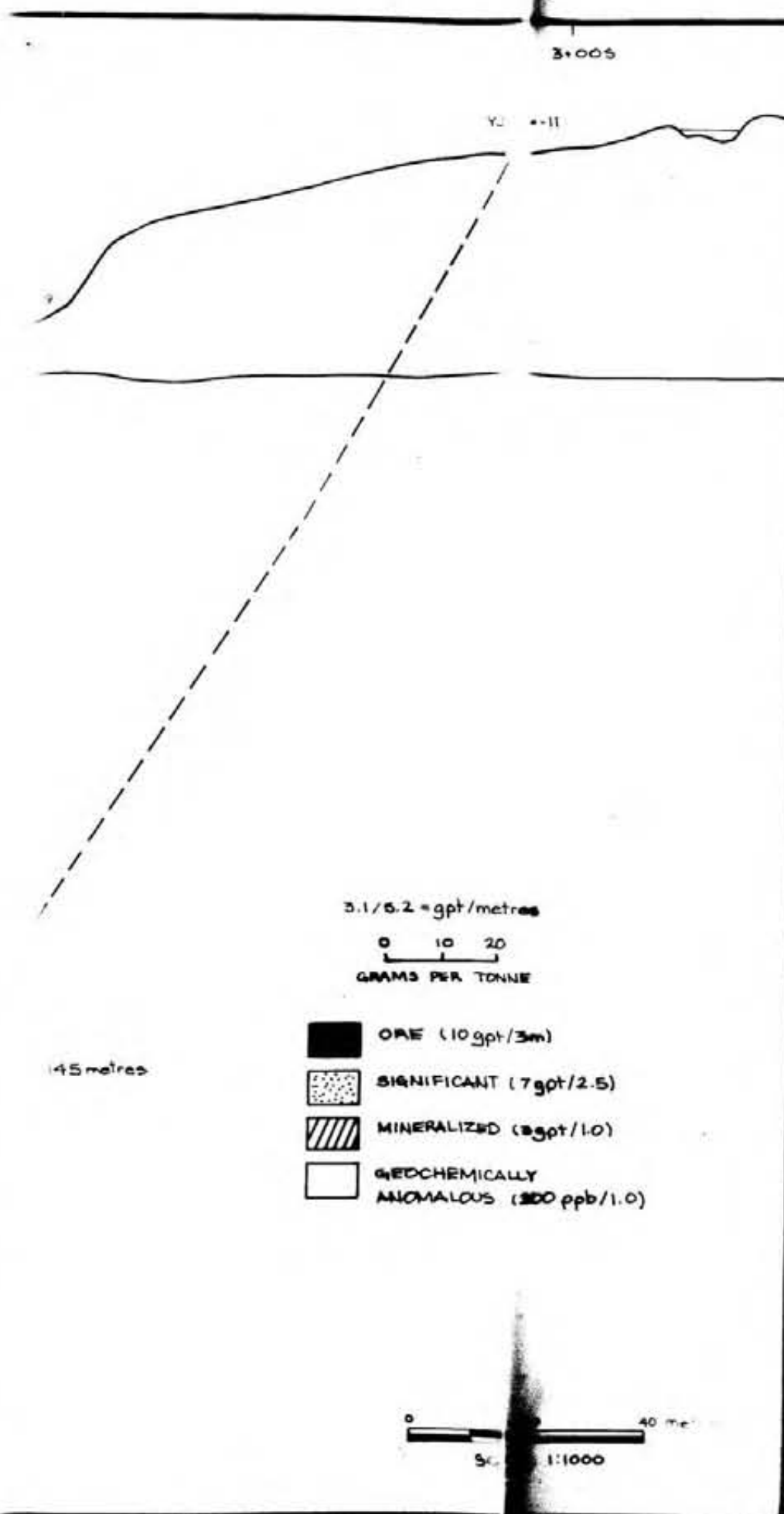
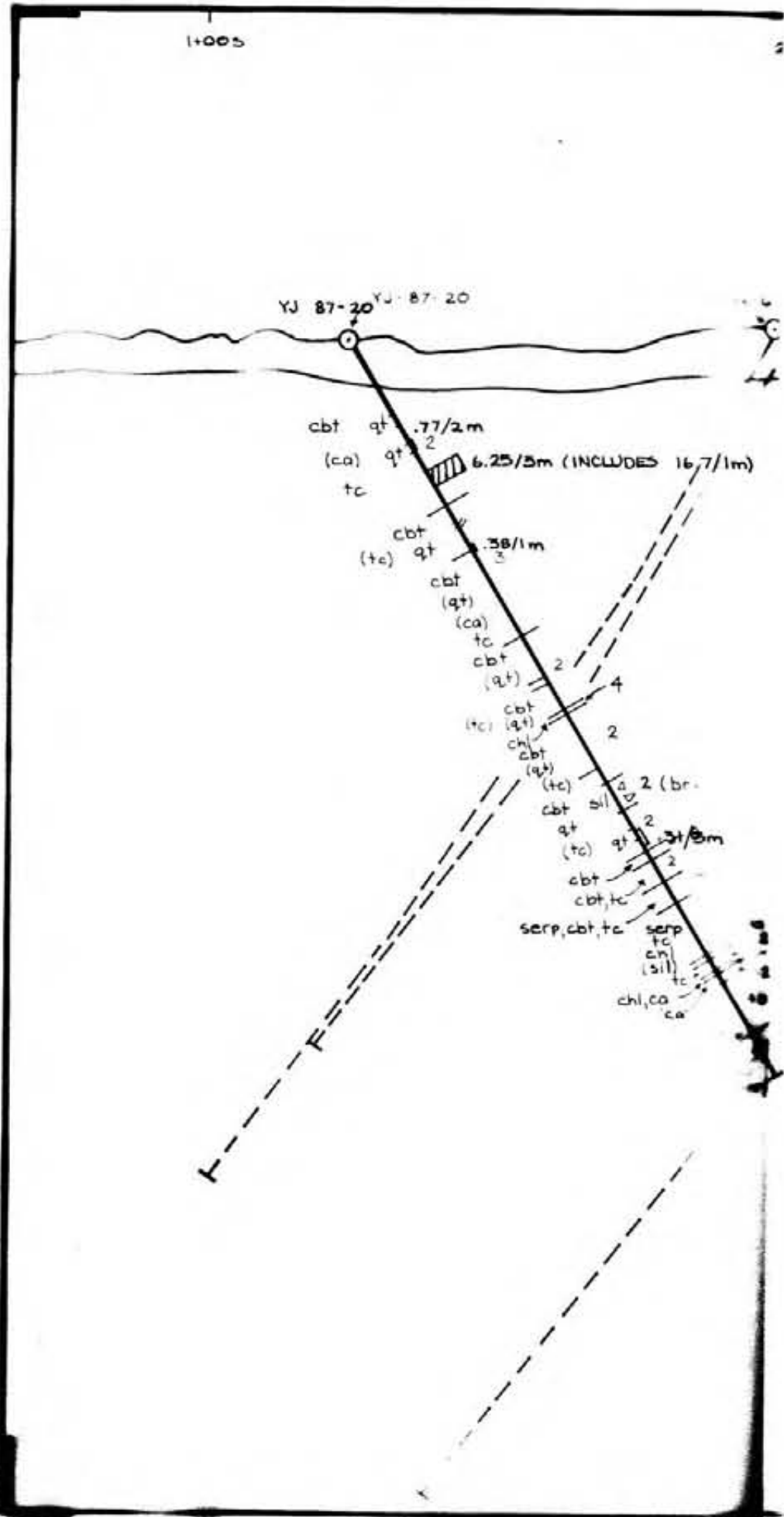
Table 2 summarizes the best gold intersections from hole 87-20 through 87-34.

TABLE 2

SUMMARY OF ASSAY RESULTS

<u>Hole No.</u>	<u>from</u>	<u>meters</u> <u>to</u>	<u>*core</u> <u>length</u>	<u>grade</u> <u>g Au/tonne</u>
87-20	26.0	29.0	3.0	7.70
87-21	74.0	78.0	4.0	2.21
	82.0	84.0	2.0	1.03
	90.0	92.0	2.0	4.05
	105.0	107.0	2.0	1.29
87-23	55.0	59.0	4.0	15.01
	Includes 55.0	57.45	2.45	24.28
	63.0	64.0	1.0	16.99
87-24	24.0	26.0	2.0	8.99
	96.0	97.0	1.0	2.85
	126.5	127.0	0.5	18.82
87-25	69.0	73.0	4.0	1.32
87-26	21.0	23.0	2.0	0.55
	155.0	156.0	1.0	1.20
87-27	64.0	67.5	3.5	0.39
	134.31	136.0	1.69	0.60
	144.0	146.52	2.52	0.56
87-29	69.0	71.0	2.0	0.30
	82.0	84.0	2.0	0.35
	125.0	126.0	1.0	0.50
	134.0	135.0	1.0	0.52
	144.0	145.0	1.0	3.15
87-31	105.0	106.0	1.0	0.48
	128.0	129.0	1.0	1.00
	138.0	139.0	1.0	0.40
	146.0	147.0	1.0	0.42
	155.45	156.20	0.75	0.41
87-32	69.0	73.0	4.0	1.05

* not corrected to true widths



3.1/5.2 = gpt/metres

0 10 20
GRAMS PER TONNE

ORE (10 gpt/3m)

SIGNIFICANT (7 gpt/2.5)

MINERALIZED (3 gpt/1.0)

GEOCHEMICALLY ANOMALOUS (200 ppb/1.0)

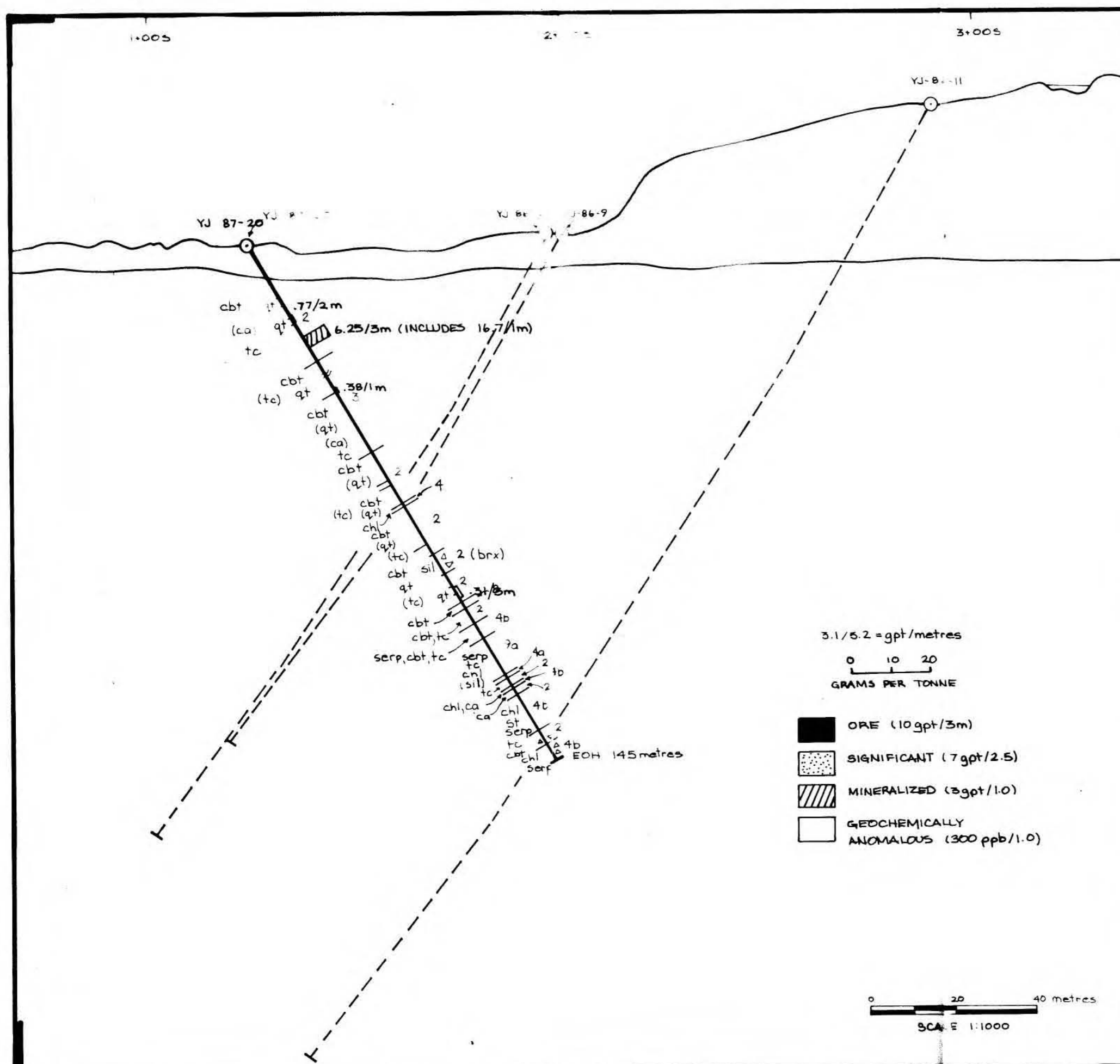
0 40 metres
50 1:1000

SECTION 13-60 EAST
DIAMOND HILL

MINERAL DEVELOPMENT COMPANY
YELLOW JACKET PROPERTY
YELLOW JACKET PROPERTY
BRITISH COLUMBIA

SECTION 13-60 EAST
DIAMOND HILL

ASSAY RESULTS
(in gpt)



~ FAULT
 - - - OTHER HOLES PROJECTED ONTO PLANE OF SECTION

LEGEND

- LITHOLOGIC TYPES
- 2 SERPENTINITE
 - 3 ALTERED
 - 4 MAFIC INTRUSIVE
 - 4a DIABASE
 - 4b GABBRO
 - 5 FELDSPAR PORPHYRY
 - 6 SYENITE
 - 8 GREENSTONE
 - 9a HORNBLENDE PORPHYRY

- ALTERATION MINERALOGY
- | | | | |
|------|------------------|----|------------|
| ca | CALCITE | mp | MARIPOSITE |
| cbt | CARBONATE | br | BRUCITE |
| sil | SILICIFICATION | st | STERCITE |
| qt | QUARTZ VEINS | ch | CHLORITE |
| serp | SERPENTINIZATION | | |
| tc | TALC BRUCITE | | |

- ORE (10gpt/3m)
- ▨ SIGNIFICANT (7gpt/2.5)
- ▧ MINERALIZED (3gpt/1.0)
- GEOCHEMICALLY ANOMALOUS (300ppb/1.0)

3.1/5.2 = gpt/metres
 0 10 20
 GRAMS PER TONNE

0 20 40 metres
 SCALE 1:1000

HOMESTAKE MINERAL DEVELOPMENT COMPANY

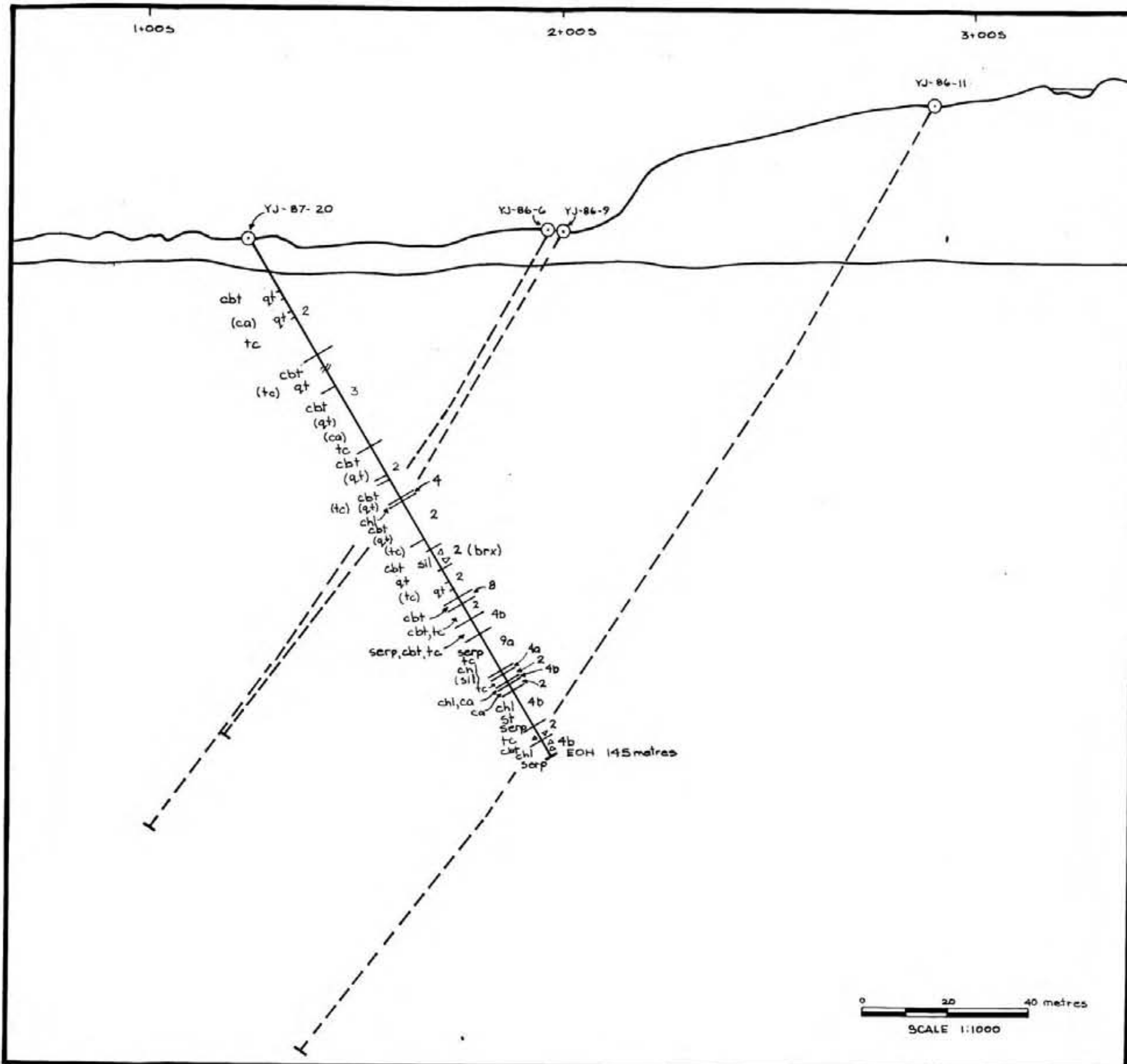
YELLOWJACKET PROPERTY
 BRITISH COLUMBIA

SECTION 13+60 EAST
 DIAMOND DRILL HOLE YJ-87-20
 DDH YJ-87-20

DRAWN MA	DATE 02/87	FILE CODE T ¹
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ASSAY RESULTS
 (in gpt)

FIGURE 6a



~ FAULT
 - - - OTHER HOLES PROJECTED ONTO PLANE OF SECTION

- LEGEND**
- LITHOLOGIC TYPES**
- 2 SERPENTINITE
 - 3 ALTERED
 - 4 MAFIC INTRUSIVE
 - 4a DIABASE
 - 4b GABBRO
 - 5 FELDSPAR PORPHYRY
 - 6 SYENITE
 - 8 GREENSTONE
 - 9a HORNBLENDE PORPHYRY
- ALTERATION MINERALOGY**
- | | | | |
|------|------------------|----|------------|
| ca | CALCITE | mp | MARIPOSITE |
| cbt | CARBONATE | bt | BIOTITE |
| sil | SILICIFICATION | | |
| qt | QUARTZ VEINS | | |
| serp | SERPENTINIZATION | | |
| tc | TALC BRUCITE | | |
| br | BRUCITE | | |
| st | GERICITE | | |
| chl | CHLORITE | | |

HOMESTAKE MINERAL DEVELOPMENT COMPANY			
YELLOWJACKET PROPERTY BRITISH COLUMBIA			
SECTION 13*60 EAST DIAMOND DRILL HOLE YJ-87-20			
DRAWN MA	DATE 02/87	FILE CODE 104N/12	FIGURE 6a
Revised _____			

0 20 40 metres
 SCALE 1:1000

1+005

2+005

3+005

LEGEND
LITHOLOGIC TYPES

- 2 SERPENTINITE
- 3 ALTERED
- 4 MAFIC INTRUSIVE
- 4b GABBRO
- 7 DIORITE
- 9 ANDESITE

ALTERATION MINERALOGY

- ca CALCITE
- cbt CARBONATE
- sil SILICIFICATION
- qt QUARTZ VEINS
- serp SERPENTINIZATION
- tc TALC
- br BRUCCITE
- gr SERICITE
- ch CHLDRITE
- bt BIOTITE
- me MARIPOSITE

--- OTHER HOLES PROJECTED ON TO PLANE OF SECTION

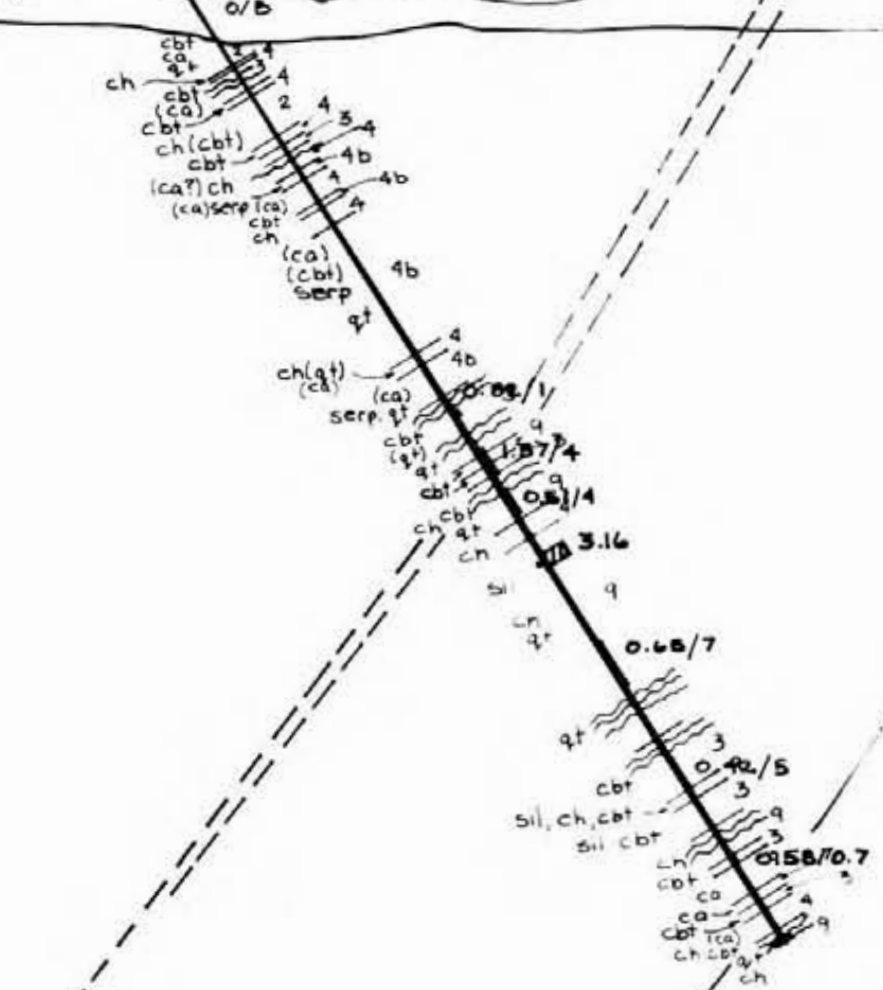
~ FAULT

0 10 20
grams per tonne

- ore (10 gpt/3m)
- ▨ significant (7 gpt/2.5m)
- ▩ mineralized (3 gpt/1m)
- geochemically anomalous (300 ppb/1m)

3.1/5.2 gpt/metres

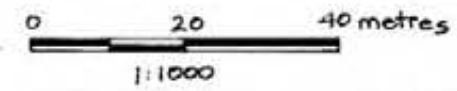
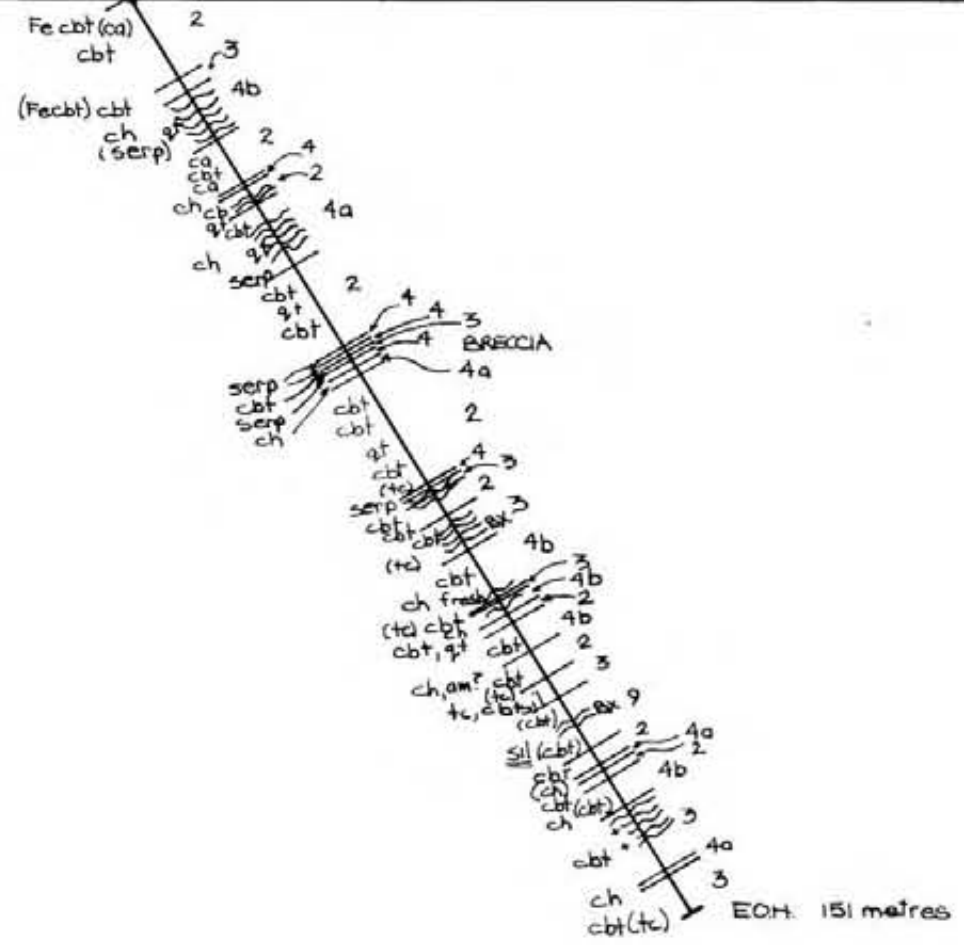
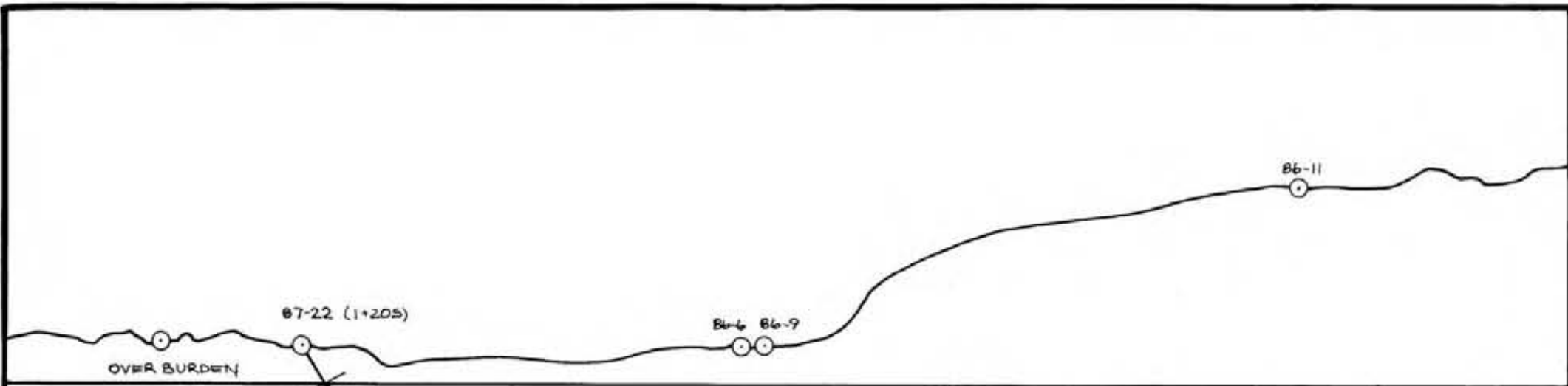
0 20 40 metres
1:1000



HOMESTAKE
MINERAL DEVELOPMENT COMPANY
YELLOUWAKET PROPERTY
BRITISH COLUMBIA

ALTERATION GEOLOGY
ASSAY RESULTS
DIAMOND DRILL HOLE #1-87-21

DRAWN MA	DATE 02/87	CODE 104N/12	FIGURE 6b
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- LEGEND**
- LITHOLOGIC TYPES**
- 2 SERPENTINITE
 - 3 ALTERED
 - 4 MAFIC INTRUSIVE
 - 4a DIABASE
 - 4b GABBRO
 - 5 FELDSPAR PORPHYRY
 - 6 SYENITE
 - 8 GREENSTONE
 - 9a HORNBLENDE PORPHYRY

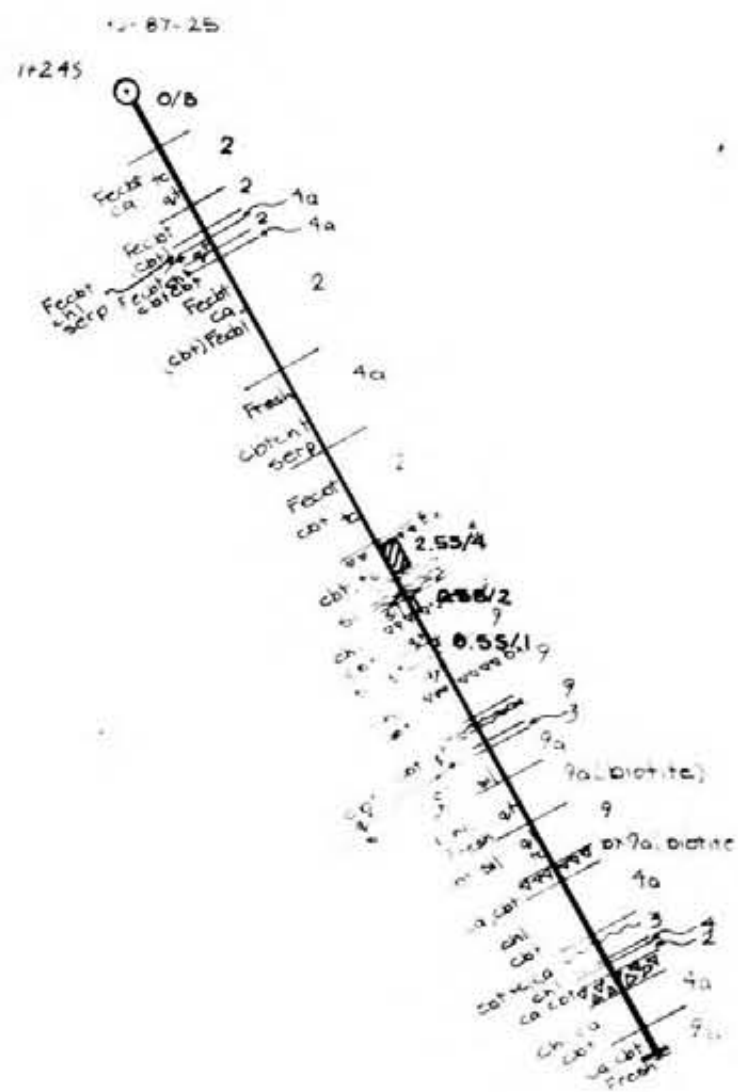
- ALTERATION MINERALOGY**
- ca CALCITE
 - cbt CARBONATE
 - sil SILICIFICATION
 - qt QUARTZ VEINS
 - serp SERPENTINIZATION
 - tc TALC BRUCITE
 - br BRUCITE
 - ser SERICITE
 - ch CHLORITE
 - me MARIPOSITE
 - bt BIOTITE
 - ~ FAULT

HOMESTAKE
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY
BRITISH COLUMBIA

GEOLOGY AND ALTERATION
DIAMOND DRILL HOLE YJ-87-22

DRAWN MA	DATE 03/87	FILE CODE 104N/12	FIGURE 6c
Revised _____			



0 10 30
GRAMS PER TONNE
2.55/4 = gpt/metre

0 20 40 metres
SCALE 1:1000

LEGEND

LITHOLOGIC TYPES

- 2 AMPHIBOLITE
- 3 GNEISS
- 4 DIORITE INTRUSIVE
- 1a DIABASE
- 9a HORNBLLENDE PORPHYRY

ALTERATION MINERALOGY

- CO CALCITE
- CaP CARBONATE
- S SERPENTINIZATION
- qtz QUARTZ VEINS
- SIL SILICIFICATION
- TAL TALC BRUCITE
- CH CHLORITE

~~~~~ FRACT

Δ Δ Δ BRECCIATION

- ORE (10gpt/3metres)
- ▨ SIGNIFICANT (7gpt/2.5m)
- ▧ MINERALIZED (3gpt/1m)
- GEOCHEMICALLY ANOMALOUS (300 ppb/1m)

HOMESTAKE  
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY  
BRITISH COLUMBIA

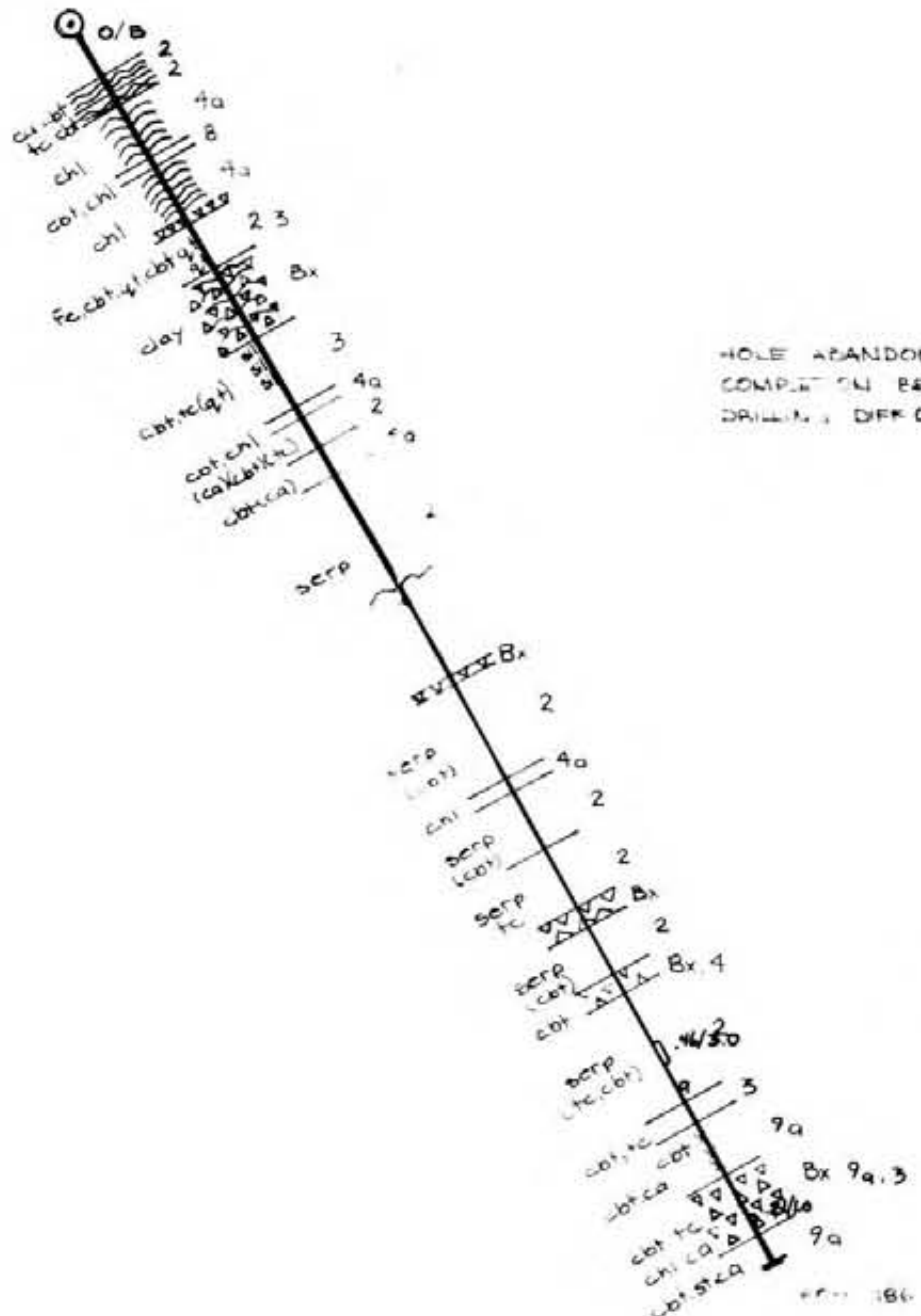
ASSAY RESULTS  
GEOLOGY AND ALTERATION  
DIAMOND DRILL HOLE YJ-87-25  
(in gpt)

|             |               |                      |           |
|-------------|---------------|----------------------|-----------|
| DRAWN<br>MA | DATE<br>03/87 | FILE CODE<br>104N/12 | FIGURE 81 |
|-------------|---------------|----------------------|-----------|



Z+30E  
0+9E5

YJ-87-26



5.1/5.2 = gpt/metres  
0 10 20  
GRAMS PER TONNE

- ORE (10gpt/3m)
- SIGNIFICANT (7gpt/25m)
- MINERALIZED (3gpt/10)
- GEOCHEMICALLY ANOMALOUS (300ppb/1.0)

LEGEND  
LITHOLOGIC TYPES

- 2 SERPENTINITE
- 3 ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 8 GREENSTONE
- 9a HORNBLENDE PORPHYRY

ALTERATION MINERALOGY

- Ca CALCITE
- C CARBONATE
- S SILICIFICATION
- Q QUARTZ VEINS
- Serp SERPENTINIZATION
- Tc TALC BRUCITE
- Ch CHLORITE

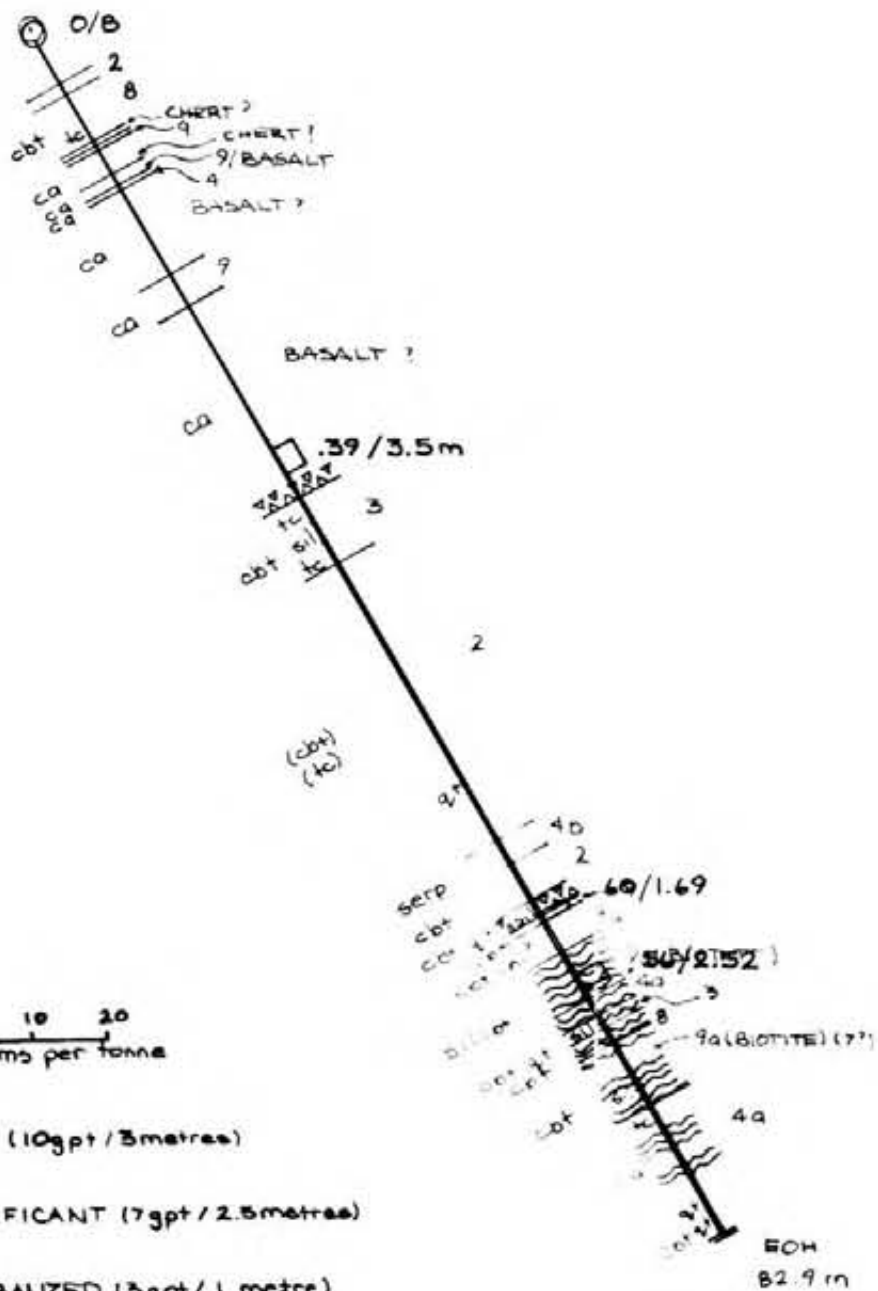
- FAULT
- BRECCIATION

HOMESTAKE  
MINERAL DEVELOPMENT COMPANY  
YELLOWJACKET PROPERTY  
BRITISH COLUMBIA  
YELLOWJACKET PROPERTY  
GEOLOGY AND ALTERATION  
BRITISH COLUMBIA  
DIAMOND DRILL HOLE YJ-87-26

|               |               |           |
|---------------|---------------|-----------|
| DDH YJ-87-26  |               | FIGURE 60 |
| ASSAY RESULTS |               |           |
| DRAWN<br>MA   | DATE<br>03/87 | (in gpt)  |

0 metres

15-35E  
0-985  
YJ 87-27  
YJ-87-27



- ORE (10gpt/3metres)
  - SIGNIFICANT (7gpt/2.5metres)
  - MINERALIZED (3gpt/1metre)
  - GEOCHEMICALLY ANOMALOUS (300ppb/1metre)
- 899/2 = gpt/metre

LEGEND

LITHOLOGIC TYPES

- 2 SERPENTINITE
- 3 ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 8 GREENSTONE
- 9a HORNBLENDE PORPHYRY

ALTERATION MINERALOGY

- ca CALCITE
- cbt CARBONATE
- sil SILICIFICATION
- qt QUARTZ VEINS
- serp SERPENTINIZATION
- talc TALC BRUCITE
- chl CHLORITE

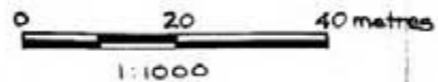
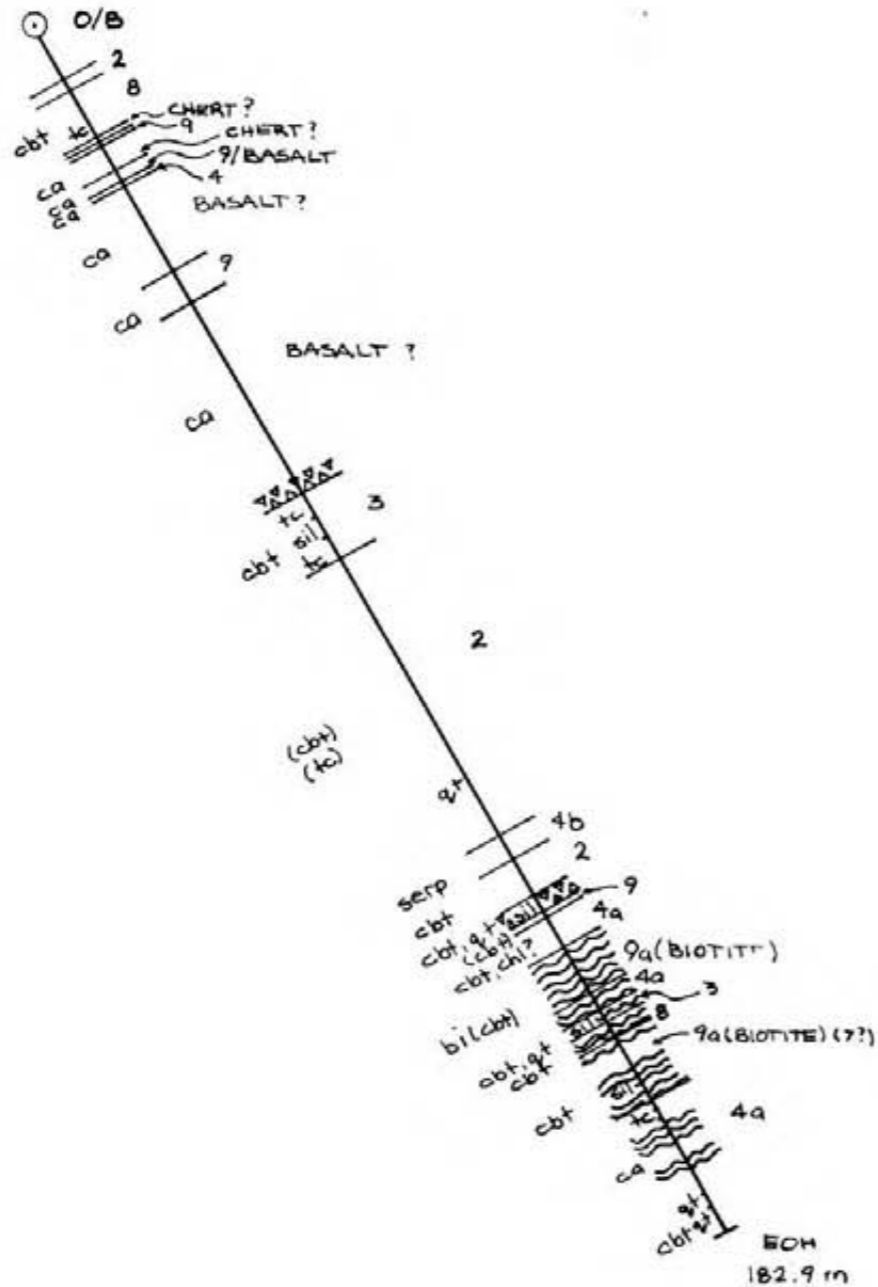
- FAULT
- BRECCIATION

|                                                                            |                 |                      |           |
|----------------------------------------------------------------------------|-----------------|----------------------|-----------|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY                                   |                 |                      |           |
| YELLOWJACKET PROPERTY<br>YELLOWJACKET PROPERTY                             |                 |                      |           |
| <b>ASSAY RESULTS</b><br>ALTERATION AND GEOLOGY<br>DDH YJ-87-27<br>YJ 87-27 |                 |                      |           |
| DRAWN<br>MA                                                                | DATE<br>4/18/87 | FILE CODE<br>104N/12 | FIGURE 6h |
| Revised _____                                                              |                 |                      |           |



15 + 35E  
0 + 98S

YJ-87-27



LEGEND

LITHOLOGIC TYPES

- 2 SERPENTINITE
- 3 ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 8 GREENSTONE
- 9a HORNBLENDE PORPHYRY

ALTERATION MINERALOGY

- ca CALCITE
- cbt CARBONATE
- sil SILICIFICATION
- qt QUARTZ VEINS
- serp SERPENTINIZATION
- tc TALC BRAUCITE
- ch CHLOITE

~ FAULT

△△△△ BRECCIATION

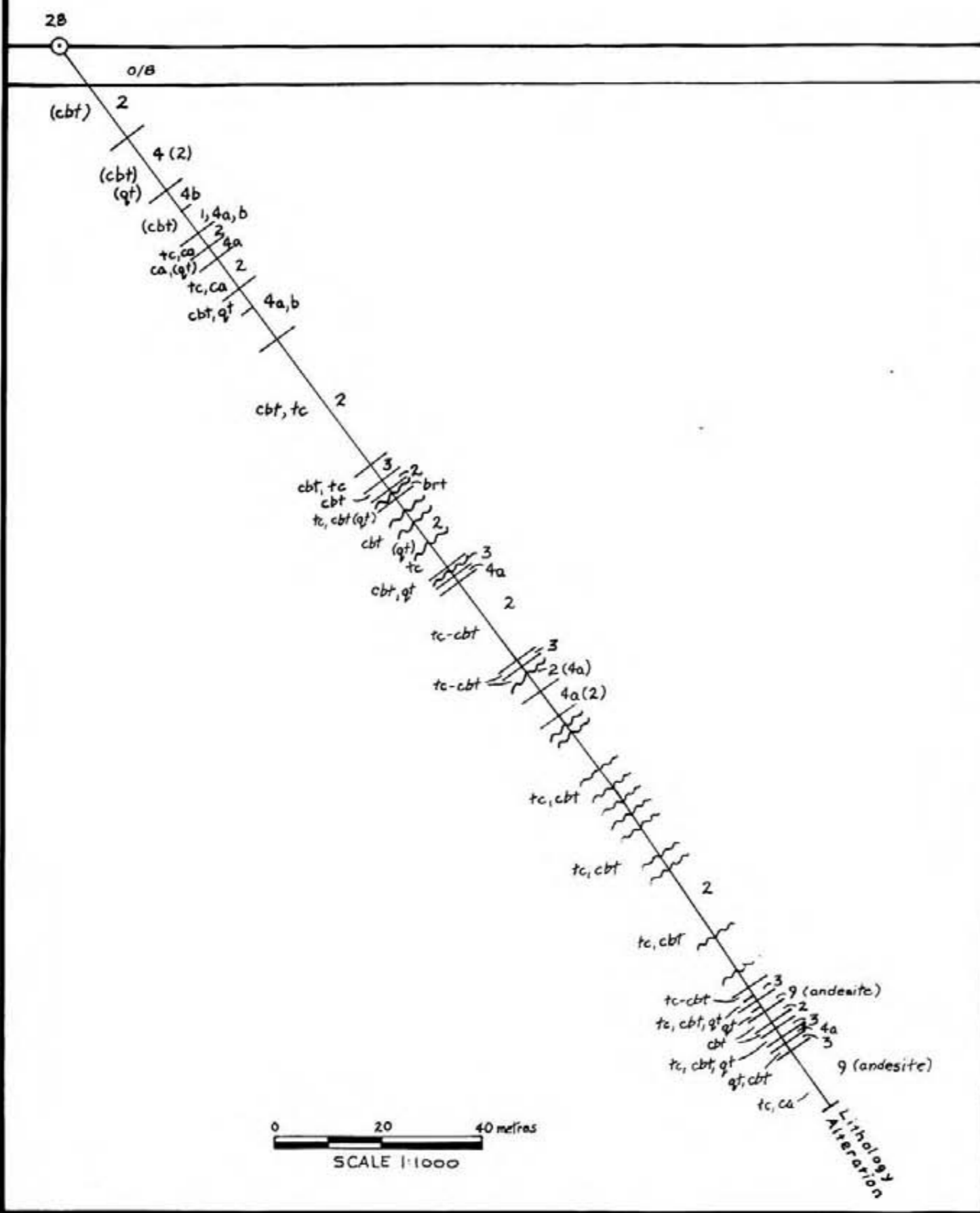
HOMESTAKE  
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY  
BRITISH COLUMBIA

ALTERATION AND GEOLOGY  
DDH YJ-87-27

|               |               |                      |           |
|---------------|---------------|----------------------|-----------|
| DRAWN<br>MA   | DATE<br>04/87 | FILE CODE<br>104N/12 | FIGURE 6h |
| Revised _____ |               |                      |           |





~ FAULT

**LEGEND**

**LITHOLOGIC TYPES**

- 2 SERPENTINE
- 3 ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 9 ANDESITE

**ALTERATION MINERALOGY**

- ca CALCITE
- cbt CARBONATE
- qt QUARTZ VEINS
- tc TALC BRUCITE

|                                                         |       |           |  |
|---------------------------------------------------------|-------|-----------|--|
| <b>HOMESTAKE</b><br><b>MINERAL DEVELOPMENT COMPANY</b>  |       |           |  |
| <b>YELLOWJACKET PROPERTY</b><br><b>BRITISH COLUMBIA</b> |       |           |  |
| <b>ALTERATION AND GEOLOGY</b><br><b>DDH YJ-87-28</b>    |       |           |  |
| DRAWN                                                   | DATE  | FILE CODE |  |
| L.S.                                                    | 08/87 | 104N/12   |  |
| Revised _____                                           |       | FIGURE 61 |  |



29

Q/B

4b

chl (ca)

8 probably 4b

chl (ca)

tc, cbt  
st, cbt  
sil

9a

tc, cbt, qt

serp (cbt)

mp, qt, sil, cbt

tc, cbt, (qt)

(sil)

mp, sil, cbt

cbt, (sil)

qt, sil

qt, to, cbt

qt, chl

fresh to cbt

tc, cbt (qt)

cbt

sil

fresh

7/9a

7/9c

9a

LEGEND

LITHOLOGIC TYPES

- 2 SERPENTINITE
- 3 ALTERED
- 4 MAFIC INTRUSIVE
- 4b GABBRO
- 7 DIORITE
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY

ALTERATION MINERALOGY

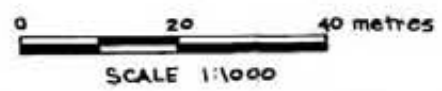
- ca CALCITE
- cbt CARBONATE
- sil SILIFICATION
- qt QUARTZ VEINS
- serp SERPENTINIZATION
- tc TALC BRUCITE
- st SERICITE
- chl CHLORITE
- mp MARIPOSITE

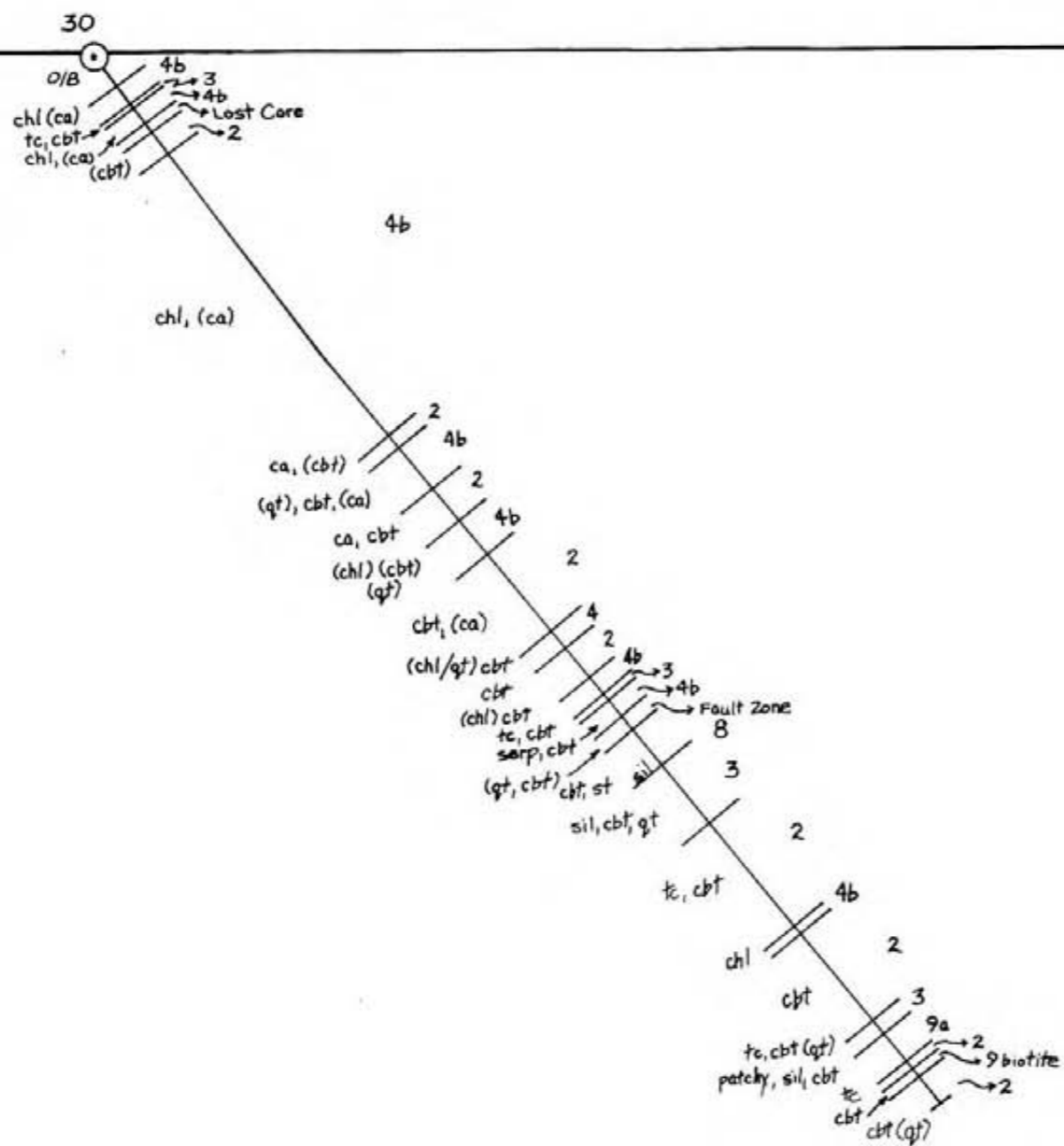
HOMESTAKE  
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY  
BRITISH COLUMBIA

ALTERATION AND GEOLOGY  
DDH YJ-87-29

|                |               |                      |           |
|----------------|---------------|----------------------|-----------|
| DRAWN<br>L. S. | DATE<br>08/87 | FILE CODE<br>104N/12 | FIGURE 6J |
| Revised _____  |               |                      |           |

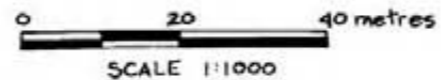




LEGEND

- 2 SERPENTINITE
- 3 COMPLETELY ALTERED
- 4 MAFIC INTRUSIVE
- 4b GABBRO
- 8 GREENSTONE
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY

- ca CALCITE
- cbl CARBONATE
- sil SILICIFICATION
- qt QUARTZ VEINS
- serp SERPENTINIZATION
- tc TALC
- st SERICITE
- chl CHLORITE

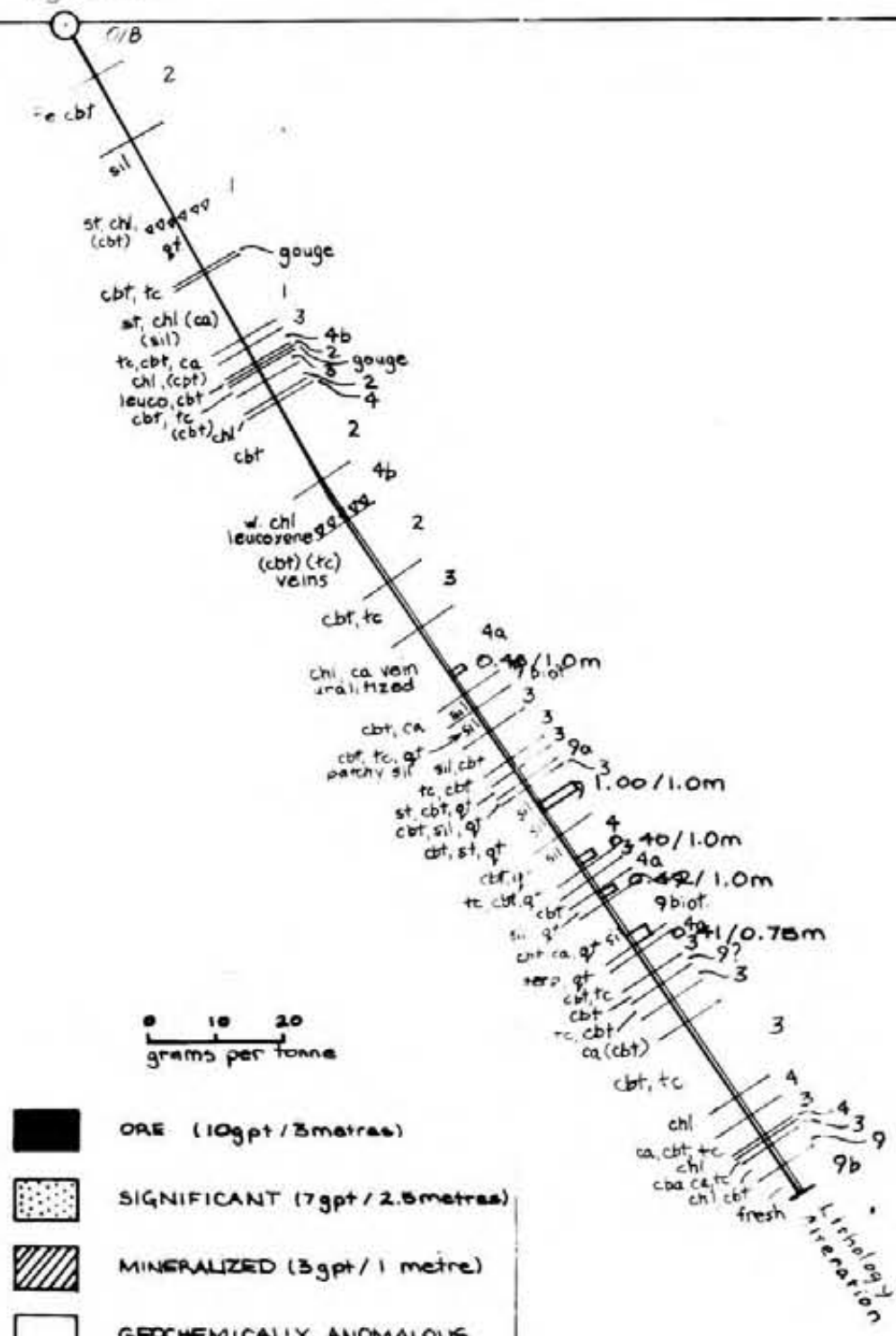


HOMESTAKE  
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY  
BRITISH COLUMBIA  
ALTERATION AND GEOLOGY  
DDH YJ-87-30

|               |               |                      |           |
|---------------|---------------|----------------------|-----------|
| DRAWN<br>L.S. | DATE<br>06/87 | FILE CODE<br>104N/12 | FIGURE 6K |
| Revised _____ |               |                      |           |

YJ 87-31



**LEGEND**

**LITHOLOGIC TYPES**

- 1 BASALT
- 2 SERPENTINITE
- 3 ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 9 ANDESITE
- 9a HORNBLLENDE PORPHYRY
- 9b FELDSPAR PORPHYRY

**ALTERATION MINERALOGY**

- ca CALCITE
- cbt CARBONATE
- sil SILIFICATION
- qt QUARTZ VEINS
- ser SERPENTINIZATION
- tc TALC BRUCITE
- st SERICITE
- ch CHLORITE
- ▲ BRECCIA

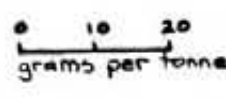
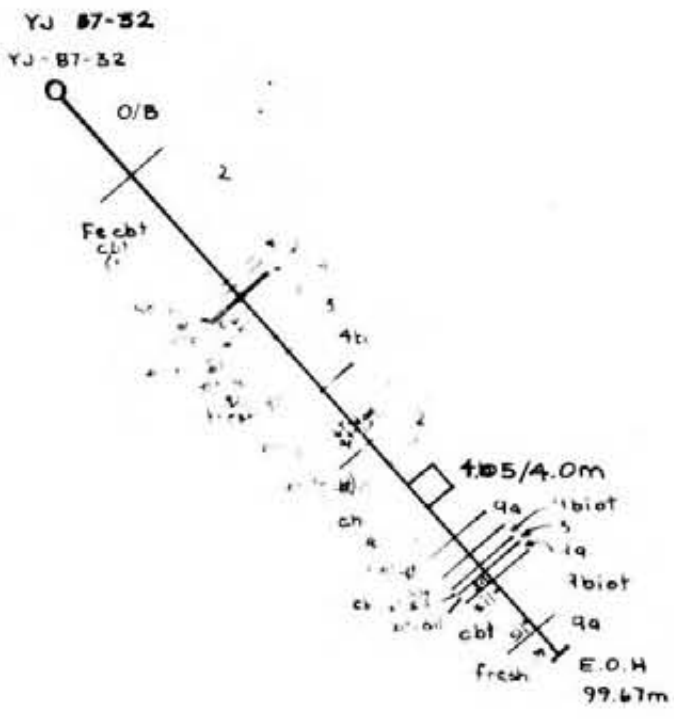
0 10 20  
grams per tonne

- ORE (10gpt/3metres)
- ▨ SIGNIFICANT (7gpt/2.5metres)
- ▧ MINERALIZED (3gpt/1metre)
- GEOCHEMICALLY ANOMALOUS (300ppb/1metre)

899/2 = gpt/metre

0 20 40 metres  
SCALE 1:1000

|                                                |                        |                     |
|------------------------------------------------|------------------------|---------------------|
| HOMESTAKE<br>MINERAL DEVELOPMENT COMPANY       |                        |                     |
| YELLOWJACKET PROPERTY<br>YELLOWJACKET PROPERTY |                        |                     |
| ALTERATION MINERALOGY                          |                        |                     |
| DDH YJ 87-31                                   |                        |                     |
| DRAWN<br>L.S.                                  | DATE<br>08/87 (in gpt) | FILE CODE<br>RWN/12 |
| Revised _____                                  |                        | FIGURE 61           |



- ORE (10gpt/3metres)
  - SIGNIFICANT (7gpt/2.5metres)
  - MINERALIZED (3gpt/1 metre)
  - GEOCHEMICALLY ANOMALOUS (300 ppb/1metre)
- 899/2 = gpt/metre

**LEGEND**

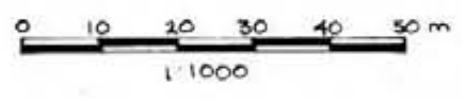
LITHOLOGIC TYPES

- SERPENTINITE
- ALTERED
- MAFIC INTRUSIVE
- GABBRO
- ANDESITE
- HORNBLENDE PORPHYRY

ALTERATION MINERALOGY

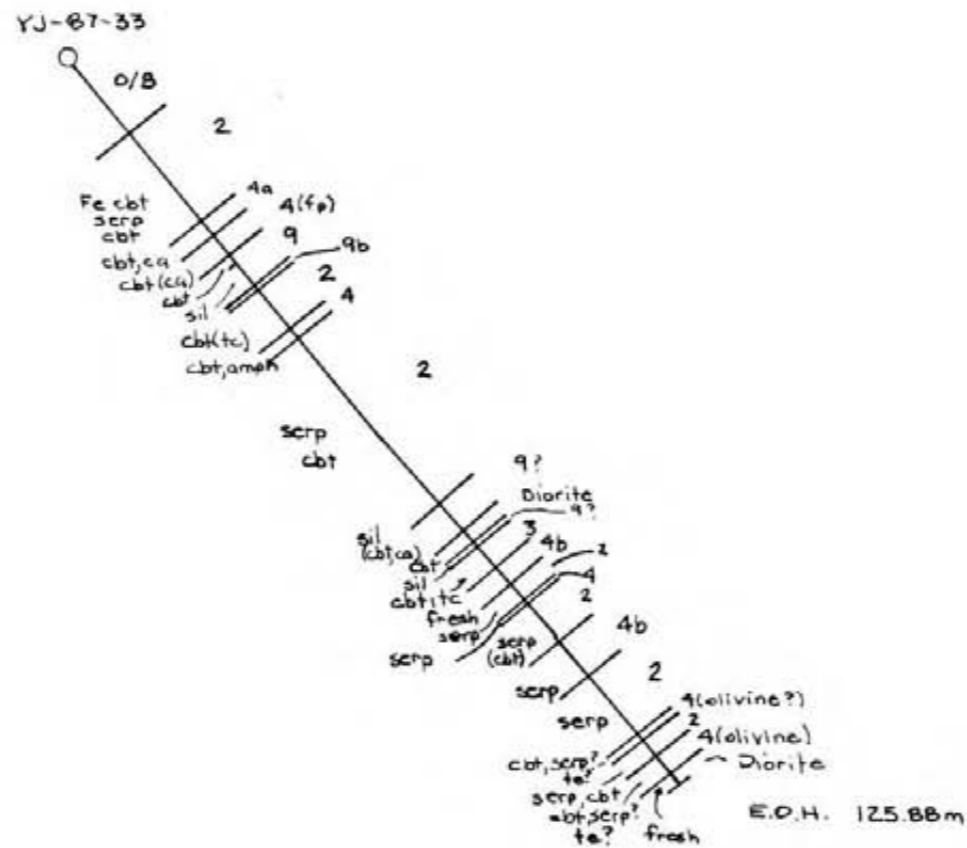
- CALCITE
- CARBONATE
- SILICIFICATION
- QUARTZ VEINS
- SERPENTINIZATION
- TALC BRUXITE

12+50E, 1+38E  
-10° to 160°



|                                           |               |                                  |
|-------------------------------------------|---------------|----------------------------------|
| HOMESTAKE                                 |               | ... 10 ...                       |
| MINERAL DEVELOPMENT COMPANY               |               |                                  |
| YELLOWJACKET PROPERTY<br>BRITISH COLUMBIA |               |                                  |
| ASSAY RESULTS                             |               |                                  |
| ALTERATION AND GEOLOGY                    |               |                                  |
| DDHY J87-3-232                            |               |                                  |
| DRAWN<br>MA                               | DATE<br>07/87 | FILE CODE<br>(in gpt)<br>104N/12 |
| Revised _____                             |               | FIGURE 6m                        |





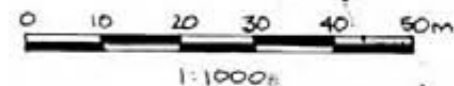
LEGEND

LITHOLOGIC TYPES

- 2 SERPENTINITE
- 3 ALTERED
- 4 MAFIC INTRUSIVE
- 4a DIABASE
- 4b GABBRO
- 9 ANDESITE

ALTERATION MINERALOGY

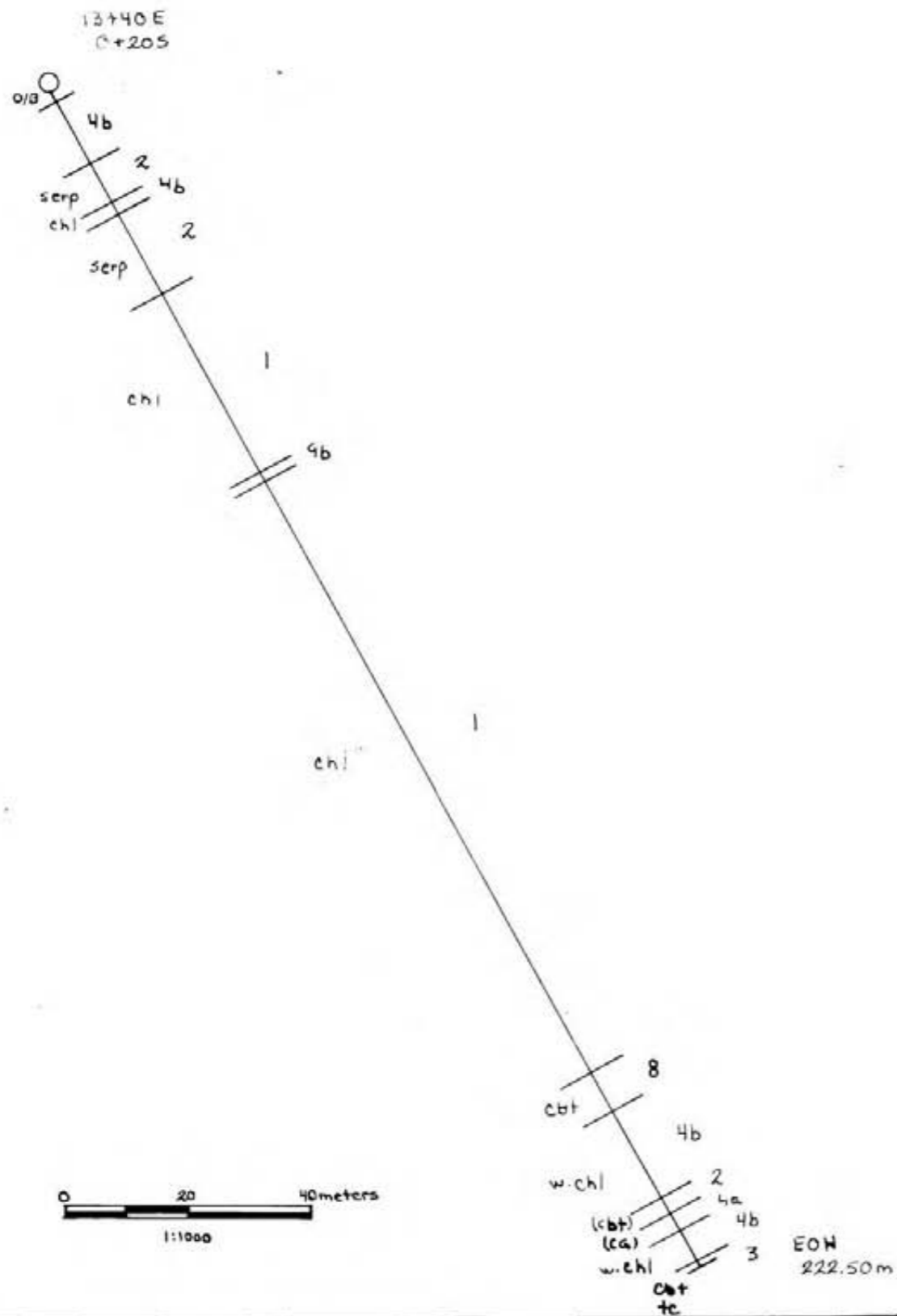
- ca CALCITE
- cbl CARBONATE
- tc TALC BRUCITE
- serp SERPENTINIZATION
- sil SILICIFICATION



HOMESTAKE  
MINERAL DEVELOPMENT COMPANY  
YELLOWJACKET PROPERTY  
BRITISH COLUMBIA  
ALTERATION AND GEOLOGY  
DDH YJ-87-33

|               |               |                      |           |
|---------------|---------------|----------------------|-----------|
| DRAWN<br>MA   | DATE<br>07/87 | FILE CODE<br>104N/12 | FIGURE 6n |
| Revised _____ |               |                      |           |





LEGEND

LITHOLOGIC TYPES:

- 1 BASALT
- 2 SERPENTINITE
- 3 ALTERED
- 4 MAFIC INTRUSIVES
- 4a DIABASE
- 4b GABBRO
- 8 GREENSTONE
- 9 ANDESITE
- 9b HORNBLЕНDE PORPHYRY

ALTERATION MINERALOGY

- ca CALCITE
- cbt CARBONATE
- serp SERPENTINITE
- tc TALC
- chl CHLORITE

HOMESTAKE  
MINERAL DEVELOPMENT COMPANY

YELLOWJACKET PROPERTY  
BRITISH COLUMBIA

ALTERATION AND GEOLOGY  
DDH YJ-87-34

|               |               |                       |           |
|---------------|---------------|-----------------------|-----------|
| DRAWN<br>DM   | DATE<br>10/87 | FILE CODE<br>104/N/12 | FIGURE 60 |
| Revised _____ |               |                       |           |

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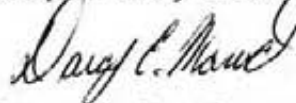
STATEMENT OF QUALIFICATIONS

I, Darcy E. Marud of Apt. 101, 1529 East Third Avenue, Vancouver, B.C., Canada, hereby certify that:

- 1) I am a graduate of the University of Saskatchewan, having been granted the degree of Bachelor of Science (Honours) in Geology in 1985.
- 2) I have practiced my profession as a geologist in mineral exploration since 1985.
- 3) At present I am employed as a geologist with Homestake Mineral Development Company of #640 - 1380 Burrard Street, Vancouver, B.C.
- 4) The work described in the accompanying report entitled "Summary Report, Surface Drilling, Arent 1, Arent 2, Beama and Adjacent Claims, North and South Claim Groups, Yellowjacket Property, Atlin Mining Division" and dated January 1988 and was done under my supervision and with my participation.
- 5) I am the author of the report described above.
- 6) 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, British Columbia this 22nd day of February, 1988.

Respectfully submitted,



Darcy E. Marud