

81-# 1110 - 9877

TECK EXPLORATIONS LIMITED

PROSPECTING REPORT

BY

GARY SCHELLENBERG, B.Sc.

ON THE

BOOT CLAIMS

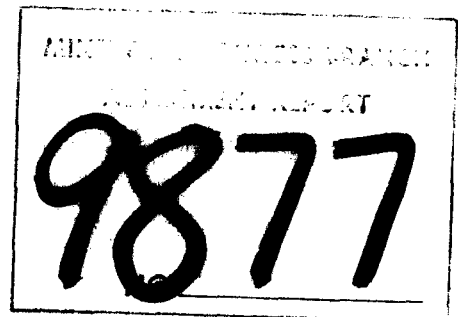
SITUATED ON THE SOUTH SIDE OF QUASH CREEK

IN THE

LIARD MINING DIVISION

57° 45'N 130° 23'W

NTS: 104G/16W



October 28, 1981

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Location and access	1
History	1
Traverses	1
Geology	1
Structure	4
Samples	4
Conclusion	6
<u>Appendix I</u> - Cost Statement	7
<u>Appendix II</u> - Statement of Qualifications G.D.A. Schellenberg, B.Sc.	8
<u>Appendix III</u> - Statement of Qualifications P. G. Folk, P.Eng.	9
<u>Appendix IV</u> - Assay Results	10
<u>Appendix V</u> - Methods	11
<u>Maps and Figures</u>	
Location Map	2
Claim Map	3
Traverse and Sample Location Map	Enclosed
Geology Map	Enclosed

INTRODUCTION

This report summarizes the work completed by Teck Explorations Limited on the Boot Claims. The claims cover areas containing copper mineralization in Triassic volcanic and sedimentary rocks intruded by dykes and small stocks of porphyritic hornblende diorite.

Prospecting on the claims took place from June 17 to 21, 1981. A total of 14 geochemical samples were taken and the geology mapped during that time.

LOCATION AND ACCESS

The Boot Claims consist of 9 units located on the south side of Quash Creek in the Liard Mining division. It is accessible by helicopter from Iskut which is approximately 20 km. N.E. from the claim area.

HISTORY

In 1964, prospectors for Conwest Explorations Co. Ltd. staked 72 claims in the Quash Creek area. By 1968, all but 16 claims were allowed to lapse. Mapping and geophysical programs were completed in 1969 and the claims optioned to Amoco Canada Petroleum Company Ltd. in 1970. Amoco drilled a total of 1,900 metres on the property and subsequently relinquished their option. In 1976, Texasgulf Canada restaked and later mapped the area. As of June 1980, all of the claims had been forfeited. On June 4, 1981, a small portion of the original showing was restaked and prospected by Teck Explorations Limited.

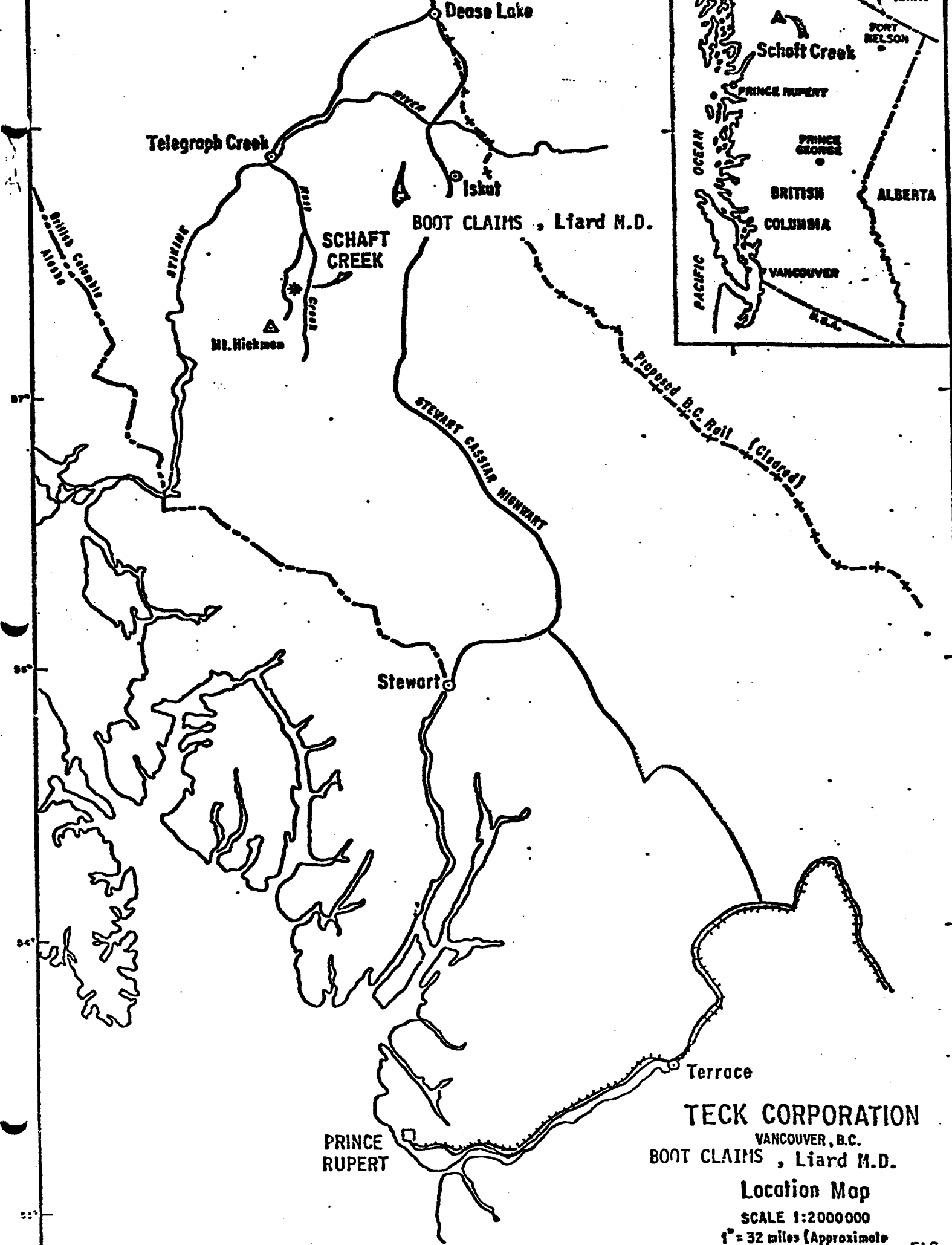
TRAVERSES

The traverses were controlled by using an altimeter, hipchain and air photographs. The rugged terrain limited the traverses to cliff tops and bottoms. The prospecting began at the Quash Creek lower camp and proceeded up slope towards the gossanous cliffs. On the second day of prospecting, the camp was moved above the cliffs to enable the remaining area to be traversed.

The enclosed traverse map only indicates the main routes and camps.

GEOLOGY

The field geology has been simplified into three basic rock units; green to grey altered andesite, porphyritic hornblende diorite, and a volcanic agglomerate. The weathered green to grey andesite is highly fractured and pyritized. Within the claim area the andesites are moderately to strongly altered and contain minor amounts of malachite along fracture surfaces. It is the altered andesite that forms the bright red limonitic gossans within the claims.



Telegraph Creek

Dease Lake

Iskut

BOOT CLAIMS, Liard M.D.

SCHAFT CREEK

Mt. Hickman

Stewart

Terrace

PRINCE RUPERT

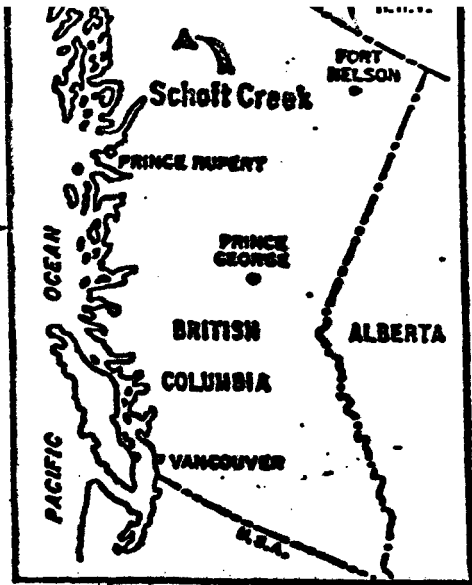
TECK CORPORATION
VANCOUVER, B.C.
BOOT CLAIMS, Liard M.D.

Location Map

SCALE 1:200000

1" = 32 miles (Approximate)

FIG. 1



Schaft Creek

PRINCE RUPERT

PRINCE GEORGE

BRITISH COLUMBIA

ALBERTA

VANCOUVER

FORT NELSON

PACIFIC OCEAN

B.C.

Proposed B.C. Rail (closed)

STEWART CASSIAR HIGHWAY

BOUNDARY ALIAS

SPINING

RAIL

Creek

97

55

54

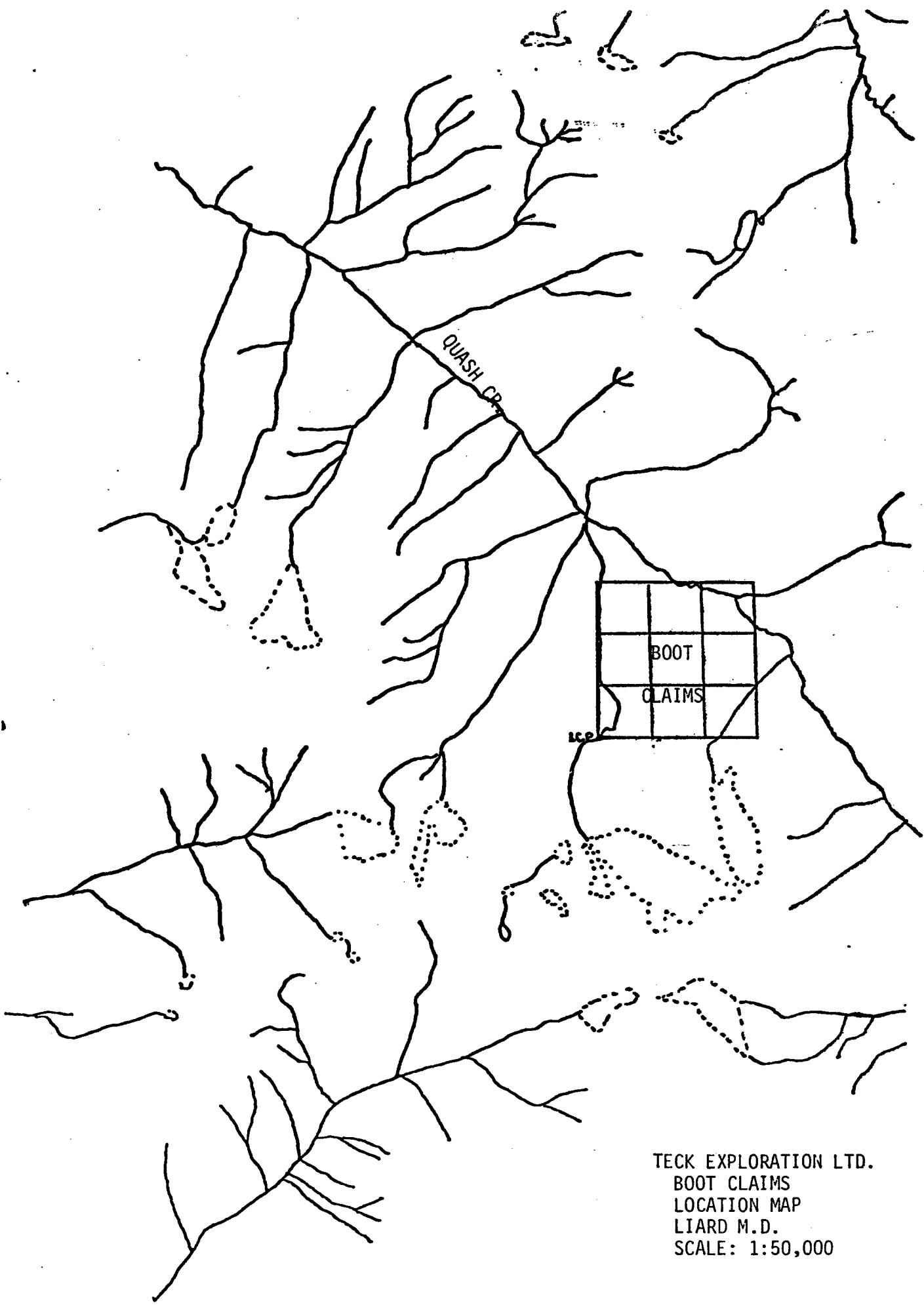
53

97

55

54

53



TECK EXPLORATION LTD.
BOOT CLAIMS
LOCATION MAP
LIARD M.D.
SCALE: 1:50,000

The hornblende diorite appears in various locations on the property but is most predominant in the east central portion of the claim block. Small amounts of chalcopyrite and malachite are found within the diorite which is believed to be the major copper source in the area.

The third rock unit, a volcanic agglomerate, contains clasts of andesite and epidote. The rock unit overlies the mineralized andesite but is totally devoid of mineralization itself. The clast size range from 1 cm. to 30 cm. in diameter and are subangular to rounded in shape.

STRUCTURE

The claim area has been highly fractured and cut by faults. It is speculated that the Boot Claims are part of a downthrust block (footwall). Judging from Amoco's previous drill results, the meta-sediment encountered below the andesite on the Boot Claims probably correlates to the sediments on the northeast side of Quash Creek, thus making the northeast side of the creek the hanging wall or the thrust block.

The sedimentary rock unit occurs in outcrop just outside of the claim block. These sediments have undergone at least two phases of deformation; tilting of beds, and foliation. The geology and observed faults have been plotted on the enclosed map.

SAMPLES

Two stream sediment samples and 12 rock chip samples were taken from the property to determine the approximate grade of the mineralization present. The stream sediment samples were multi-element analysed by ICP; and the rock chip samples assayed by normal assay techniques for Cu, Ag, Au, Mo. The assay results and methods have been compiled in Appendix IV and V and were supplied by Acme Analytical Laboratories of Vancouver. The sample locations and lengths have been plotted on the enclosed map.

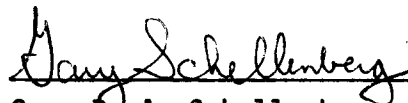
The following is a summary of the field notes that accompany the sample location map. Basic rock types, descriptions and sample lengths are included.

<u>Sample No.</u>	<u>Description</u>
R81GS24	<ul style="list-style-type: none">- Sample taken over 44 m.- Rock type: Porphyritic hornblende diorite.- Minor fault is in close proximity.- Moderately fractured.
R81GS25	<ul style="list-style-type: none">- Sample taken over 40 m.- Rock type: Porphyritic diorite.- Malachite abundant.- Rock is very iron stained.- Highly fractured rock.

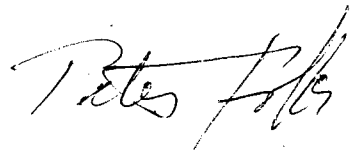
<u>Sample No.</u>	<u>Description</u>
R81GS26	<ul style="list-style-type: none">- Sample taken over 44 m.- Description is the same as R81GS25.
R81GS27	<ul style="list-style-type: none">- Sample taken over 40 m.- Rock type: Porphyritic diorite.- Small amount of Chalcopyrite present.- Malachite abundant.
R81GS28	<ul style="list-style-type: none">- Sample taken over 60 m.- Malachite present in blotches.- Rock type: porphyritic diorite.- Fault bounds mineralized zone.
R81GS29	<ul style="list-style-type: none">- Sample taken over 30 m.- Rock type: Pyritized, altered green andesite.- Rock very limonitic.- Very little malachite present.- Rock very fractured.
R81GS30	<ul style="list-style-type: none">- Sample taken over 30 m.- Description is the same as R81GS29.
R81GS31	<ul style="list-style-type: none">- Sample taken over 35 m.- Rock type: Altered green andesite.- Rock very limonitic.- Small amount of malachite along fractures.
R81GS32	<ul style="list-style-type: none">- Sample taken over 50 m.- Rock type: crystalline altered andesite.- Rock very iron stained.- Pyrite mineralization dominant.
R81GS33	<ul style="list-style-type: none">- Sample taken over 60 m.- Rock type: Porphyritic hornblende diorite.- Malachite and chalcopyrite present.- Rock is pyrite rich (up to 4% pyrite).
R81GS34	<ul style="list-style-type: none">- Sample taken over 40 m.- Malachite is abundant.- Rock type: Pyrite rich green andesite.- Rock is very gossanous and fractured.
R81GS35	<ul style="list-style-type: none">- Sample taken over 30 m.- Malachite is abundant along fractures.- Gossanous outcrop.- Rock type: Green andesite.

CONCLUSION

Prospecting and sampling of the Boot Claims shows potential as a low grade porphyry copper deposit. The majority of the copper values were obtained from the hornblende diorite intrusive which is found throughout the property. Copper mineralization is also found along fractures in the altered andesites but is of low grade. The highest copper value obtained on the claims was .45% over 40 metres but the average grade is believed to be closer to .25% copper. Most of the mineralized zones are highly fractured and cut off by faults. Therefore, more detailed structural analysis is required in the area before a more accurate evaluation can be made.



Gary D. A. Schellenberg, B.Sc.



APPENDIX I
ITEMIZED COST STATEMENT

	\$
<u>Wages</u>	
G. Schelleberg, Geologist 5 days @ \$125/day	June 17-21 625.00
M. Kay, Helper 5 days @ \$60/day	June 17-21 300.00
<u>Room and Board</u>	
5 days x 2 men x \$20/day/man	200.00
<u>Instrument Rental</u>	
1 Radio x 5 days x \$15/day	75.00
<u>Geochemical Assays</u>	
12 @ \$18.50	222.00
2 @ \$6.30	12.60
<u>Freight</u>	150.00
<u>Transportation</u>	
Quasar Helicopters, Bell 206B 2 hrs. @ \$500/hour, including fuel	1,000.00
<u>Report preparation and drafting</u>	<u>400.00</u>
<u>TOTAL:</u>	<u>\$2,984.60</u>

APPENDIX II

CERTIFICATE OF QUALIFICATIONS

GARY D.A. SCHELLENBERG, B.Sc.

I hereby certify that:

- 1) I graduated from the University of British Columbia in May of 1981 with a B.Sc. degree in geology.
- 2) I have worked as an exploration assistant and mine geologist assistant during the summer months prior to graduation.
- 3) I have worked since graduation as an exploration geologist in Canada.



Gary D.A. Schellenberg, B.Sc.

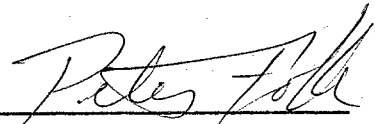
APPENDIX III

CERTIFICATE OF QUALIFICATIONS

Peter G. Folk, P.Eng.

I hereby certify that:

1. I graduated from the University of British Columbia in 1971 with a B.A.S.C. degree in geological engineering.
2. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
3. I have worked since graduation as an exploration geologist and mine geologist in Canada and the United States.
4. The work described herein was done under my direct supervision.



Peter G. Folk, P.Eng.



To: Test Explorations Ltd.,
 1100 - 1100 W. Hastings St.,
 Vancouver, B.C.
 V6E 2K5

Assaying & Trace Analysis
 852 E. Hastings St., Vancouver, B.C. V8A 1R6
 Telephone: 253-3158

81-007
 File No. _____
 Type of Sample Rock Chips
 Disposition _____

ASSAY CERTIFICATE

Project : 1264

No.	Sample	Mo%	Cu%	Pb%	Zn%	Ag oz/ton	Au oz/ton	LENGTH(m)	No.
7	R81 GS 24	.003	.11	.02	.01	.03	.001	44m	7
8	25	.004	.22	.01	.01	.05	.005	40m	8
9	26	.003	.18	.01	.01	.01	.001	44m	9
10	27	.002	.45	.01	.01	.05	.001	40m	10
11	28	.001	.15	.01	.01	.02	.001	60m	11
12	29	.005	.05	.01	.01	.02	.001	30m	12
13	30	.004	.06	.01	.01	.01	.001	30m	13
14	31	.004	.06	.01	.01	.01	.001	35m	14
15	32	.003	.06	.01	.01	.03	.001	50m	15
16	33	.002	.17	.01	.01	.03	.001	60m	16
17	34	.003	.21	.01	.01	.04	.001	40m	17
18	35	.002	.11	.01	.06	.04	.001	30m	18

*HO/GS 45
 EGC

BURN # 1 GE16 9:17 7JULY81

IS										
1353										
MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	
4.1	216	13	114	.564	23	30	866	5.351	22	.110
U	IS	TH	IS	CD	SB	BI	V	CA	P	
-2	.5	1	1827	5	.324	2	172	1.6	.14	
LA	IN	MG	BA	TI	B	AL	IS	IS	W	
17	.8	1.7	.30	.13	29	2.0	32	5	3	

AU

*O/GS 55R
 EGC

BURN # 1 GE16 9:26 7JULY81

1353										
23	353	13	172	.967	13	33	896	7.230	35	.05
1	.5	.9	1661	6	10.5 2	U	148	.95	.18	
18	U	1.5	.30	.39	14	2.2	22	5	2	

AA
LL

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone : 253 - 3158

Multi Element Analysis by ICP

Digestion of Sample

0.5 gram samples are digested with hot aqua regia for one hour and the sample is diluted to 10 ml. The diluted sample is aspirated by ICP and the analytical results are printed by Telex, either in percent or ppm as shown.

Please Note : This digestion is partial for Al, Ca, La, Mg, P
Ti, W and very little Ba is dissolved.

Report Format

HO/22N 3850W
EGC

BURN # 1 GE16 15:46 3FEB1981

IS
1357

MO	CU	PB	ZN	AG	NI	CO	MN	FE%	AS
3.92	41.5	9.00	136	.332	15.3	5.70	312	3.167	5.73
U	IS	TH	IS	CD	SB	BI	V	CA%	P%
4.11	.371	.424	1073	.960	1.94	4.51	52.7	1.107	.206
LA	IN	MG%	BA%	TI%	B	AL%	IS	IS	W
22.1	3.50	.2589	.0184	.0014	-.05	1.720	0	3.06	.276

*O/M1
EGC

BURN # 1 GE16 15:48 3FEB1981

1358

.563	29.3	34.6	171	.154	33.4	11.5	794	2.536	8.77
3.57	.044	2.79	765	1.08	.635	4.25	54.8	.6452	.109
6.42	2.88	.6008	.0252	.0753	-.37	1.944	0	2.32	-.61

Code :

HO, *O, EGC
/22N 3850 W
/M1
15:46 3FEB1981
BURN # 1 GE16
IS

Computer Instructions.
Sample Number.
ACME Geochem standard for quality control.
Time and Date of Analysis.
Geochem Computer Program.
Internal Standard.

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone : 253 - 3158

Interpretation of Results

Standard M-1 is a certified geochem standard used to monitor the results. M-1 has the following analysis.

1.	Mo	:	in ppm	M1	2.	ppm
2.	Cu	:	in ppm	M1	28.	ppm
3.	Pb	:	in ppm	M1	38.	ppm
4.	Zn	:	in ppm	M1	180.	ppm
5.	Ag	:	in ppm	M1	0.3	ppm
6.	Ni	:	in ppm	M1	32.	ppm
7.	Co	:	in ppm	M1	12.	ppm
8.	Mn	:	in ppm	M1	800.	ppm
9.	Fe	:	in %	M1	2.5	%
10.	As	:	in ppm	M1	8.	ppm
11.	U	:	in ppm	M1	3.	ppm
12.	IS	:	Internal Standard.			
13.	Th	:	in ppm	M1	3.	ppm
14.	IS	:	Internal Standard.			
15.	Cd	:	in ppm	M1	2.	ppm
16.	Sb	:	in ppm	M1	3.	ppm
17.	Bi	:	in ppm	M1	2.	ppm
18.	V	:	in ppm	M1	54.	ppm
19.	Ca	:	in %	M1	0.62	%
20.	P	:	in %	M1	0.11	%
21.	La	:	in ppm	M1	8.	ppm
22.	In	:	in ppm	M1	2.	ppm
23.	Mg	:	in %	M1	0.67	%
24.	Ba	:	in %	M1	0.023	%
25.	Ti	:	in %	M1	0.07	%
26.	B	:	in ppm	M1	12.	ppm
27.	Al	:	in %	M1	1.9	%
28.	IS	:	Internal Standard.			
29.	IS	:	Internal Standard.			
30.	W	:	in ppm	M1	1.	ppm

Notes:

1. Zinc over 5000 ppm interferes on W channel.
2. Iron over 1. % interferes on In and Sb channel.

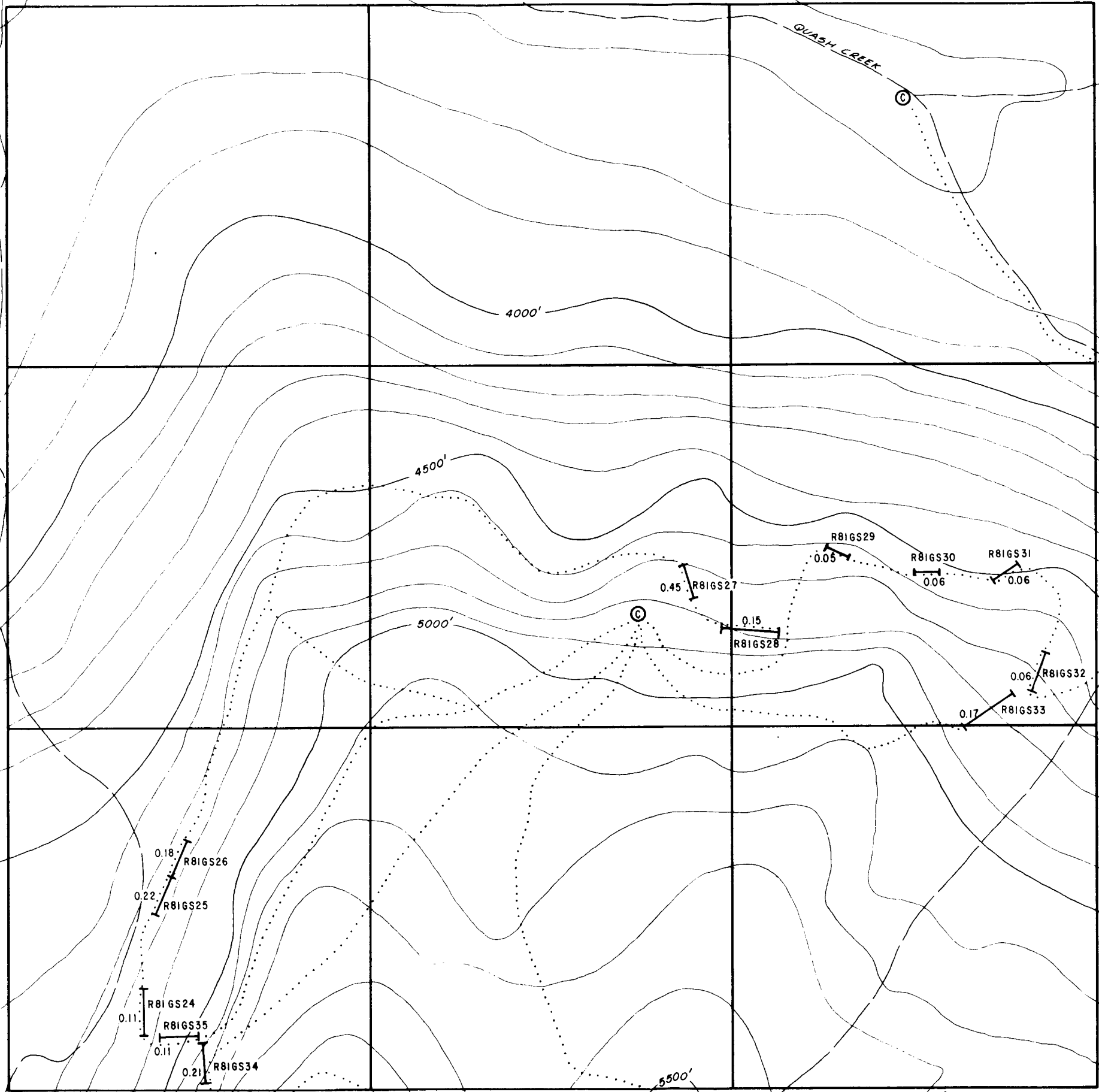
Monitoring of Results:

If analysis of standard M-1 is different than the certification, then compensate (add or subtract) samples appropriately.

Standardization:

Complete set of USGS standards, Canadian Certified Reference Materials and 72 specpure metals from Johnson Matthey.

S81GS45



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9877
NO.

LEGEND

- ROCK CHIP SAMPLE LENGTH
- 0.17 Cu PERCENTAGE
- S81GS55 SILT SAMPLE LOCATION
- TRAVERSE
- ⊙ CAMP

TECK EXPLORATIONS LTD.

**- BOOT CLAIMS -
SAMPLE LOCATION
& TRAVERSE MAP**

LIARD MINING DIVISION - QUASH CREEK AREA

100 0 100 200
m.

1:6250

Jan Schillberg
BSE
June 21/81

CLAIM BOUNDARY



MINERAL RESOURCES BRANCH
 ACTING ASSISTANT REGISTRAR
9877
 NO.

LEGEND

- GV Green to Grey Volcanics, Andesite & Andesite porphyrys. Triassic in age
- *** Intrusives, hornblende, diorite. Cretaceous in age
- VB Volcanic Breccia with andesite fragments, and epidote clasts, non-mineralized. Triassic in age (prob more recent than GV)
- lim Limonite
- Ep Epidote
- Cl Chlorite
- Cp Chalcopyrite
- Py Pyrite
- Chalcopyrite, Malachite
- Pyrite, limonite zone
- Approximate locations of Amoco drill sites
- × Camp, also old drill site
- Fracture orientation
- Fault, and dip of fault
- Inferred fault
- Contact - defined, inferred
- Outcrop

TECK EXPLORATIONS LTD.

- BOOT CLAIMS -
GEOLOGY MAP

LIARD MINING DIVISION - QUASH CREEK AREA

100 0 100 200
 1:6250 m

*Dan Schillberg
 B.Sc.
 June 21/81*