84-1040— 13003

BOLD 2 CLAIM GEOLOGICAL

ASSESSMENT REPORT

NANAIMO MINING DIVISION, VANCOUVER ISLAND, BC

REPORT NO: 637
Author: I Lyn
Owner & Operator:
Brinco Mining Ltd.
NTS: 92 F/13
Latitude: 49° 51'N
Longitude: 125° 32'W
Date: November 13, 1984

TABLE OF CONTENTS

LIST OF MAPS

SUMMARY

The Bold 2 claim of 20 units is near Upper Quinsam Lake, 29km southwest of Campbell River on Vancouver Island. It was mapped geologically in June 1984. The claim covers Karmutsen Formation basalt flows in the southern and western part, overlain by Quatsino Formation Limestone to the northeast, both cross cut by the intrusive Quinsam Granodiorite contact across the northern part of the claim. Skarns with local magnetite zones continuing minor chalcopyrite and sphalerite mineralization developed in limestone and volcanic adjacent to the intrusive contact. Low gold and silver values are associated with the mineralization.

LOCATION AND ACCESS

The Bold 2 Claim is located 29 km southwest of Campbell River in the Nanaimo Mining Division on Vancouver Island, map sheet 92 F/13. Access by road from Campbell River is by Highway 28 to Echo Lake, then by main logging road to the old Argonaut Mine on Upper Quinsam Lake and then local logging roads, the total distance being approximately 35 km. The local logging roads give good access to most of the claim, which is presently being logged.

PROPERTY

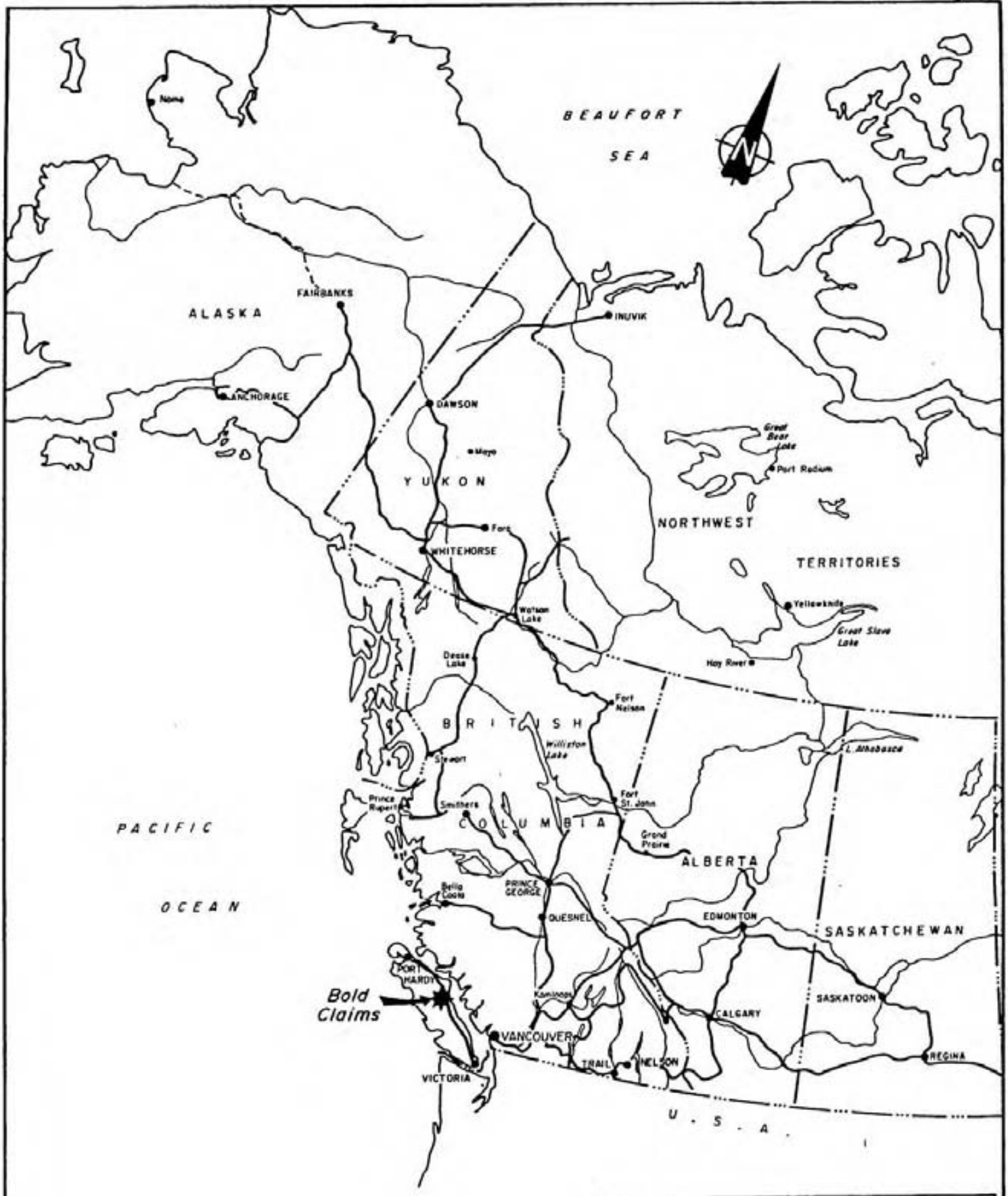
The Bold 2 Claim of 20 units was staked 19th September 1983 and recorded 23rd September 1983 No. 1575. It is owned and operated on by Brinco Mining Limited of Vancouver, BC. No history of prior work on the claim is known but it is close to the Argonaut Mine open pit which was mined for iron ore from 1951 to 1956.

GEOLOGY

Work was done on the claim from June 6th to 11th 1984 and consisted of geological mapping of 500 ha in general and 20 ha in detail at a scale of 1:5,000. Eleven rock samples were submitted for analysis to Acme Analytical Ltd. in Vancouver. The base map used was an enlargement of NTS sheet 92 F/13 which has some inaccuracies compared to the actual topography. Logging roads and other features were plotted by use of airphotos and ground surveying. The amount of outcrop on the claim is good, and is especially apparent where it has been logged. On the map (fig. 3) outcrops are generally plotted only along road cuts, they can be assumed to be fairly regularily distributed over the rest of the map.

Three major rock units occur on the claim, the Karmutsen Formation volcanics, (unit 1) Quatsino Formation Limestone (unit 2) and Quinsam Intrusion Granodiorite (unit 4). The Karmutsen Formation underlies the southern and western part of the claim. It consists of massive basalt flows which are often amydular, and in places pillowed. The basalts are finegrained, in places with porphyritic feldspar and the amydules contain chalcedonic quartz and epidote. Distinct flow contacts near the southern part of the claim show a 20° to 30° northerly dip.

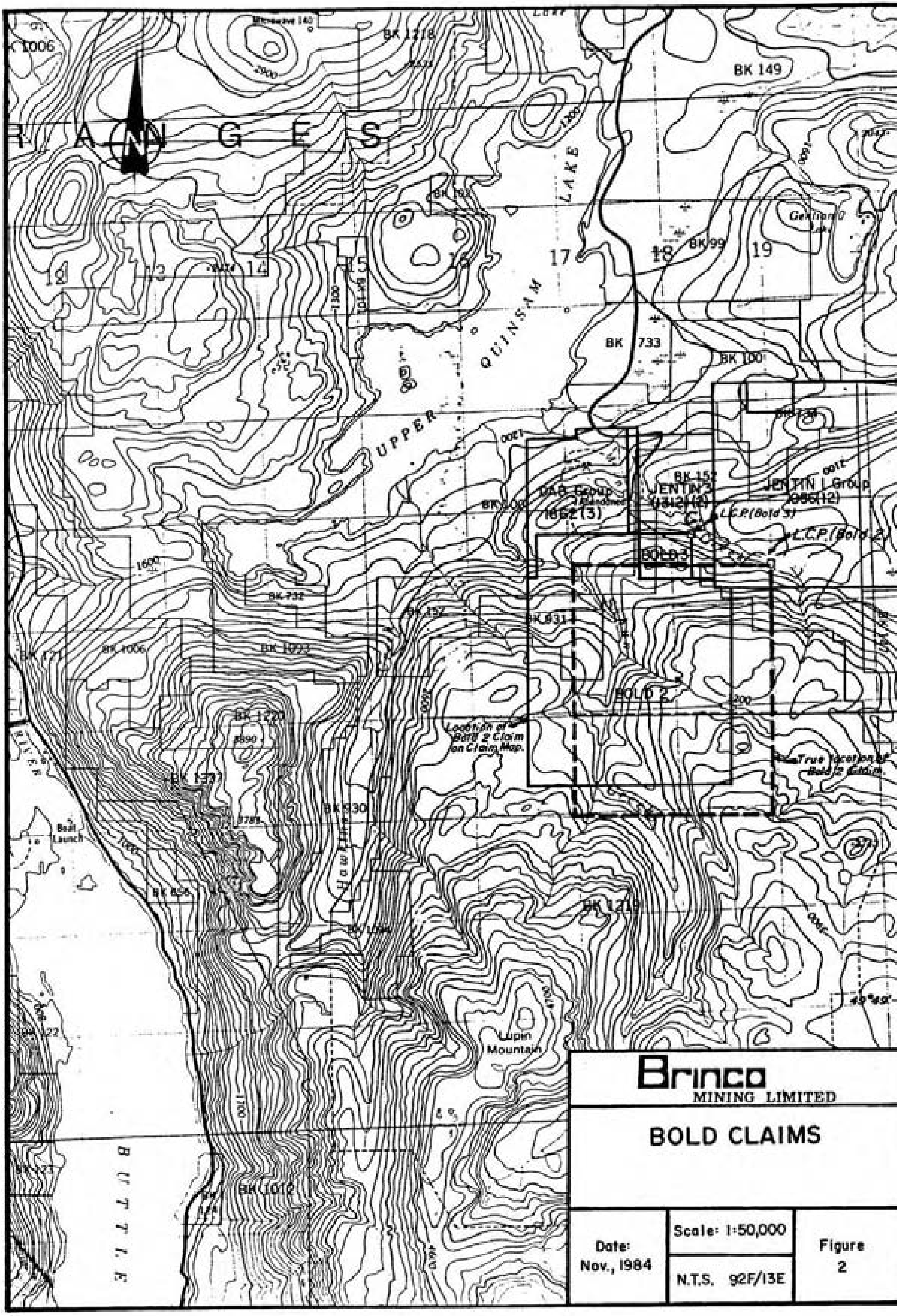
The Quatsino Limestone outcrops over a wedge shaped area across the north central part of the claim as it pinches out to the west between the Karmutsen volcanics and Quinsam Granodiorite. It is 1 to 3 mm crystalline marble generally light to medium grey with darker banding in places. I.C.P. analysis of 4 samples shows it to contain about 97% $CaCO_3$. (Appendix 1) The limestone in general conformably overlies the Karmutsen, which, however, contains some thin limestone lenses below the main contact. Structure within the limestone is difficult to determine but it appears to have undergone strong flowage shearing in places. Road cuts along the main road across the claim show the limestone to be crosscut by numerous mafic dykes and sills. The dykes were much less common in the volcanics and granodiorite.



Brinco
MINING LIMITED

BOLD CLAIMS
PROPERTY LOCATION MAP

DATE. Nov., 1984 | FIGURE: 1


R A N G E S
BK 1218
BK 149
BK 99
BK 733
BK 100
UPPER QUINSAM LAKE
12
13
14
15
16
17
18
19
DAD Group 1862(3)
JENTIN 3 1312(2)
JENTIN I Group 1086(12)
BK 157
BK 831
BOLD 3
BOLD 2
L.C.P. (Bold 3)
L.C.P. (Bold 2)
Location of Bold 2 Claim on Claim Map.
True location of Bold 2 Claim.
BK 732
BK 1093
BK 1006
BK 1220
BK 1327
BK 830
BK 856
BK 1219
BK 1012
BK 122
BK 123
Boat Launch
Lupin Mountain
BUTTLE
49°49'
Brinco
MINING LIMITED
BOLD CLAIMS
Date: Nov., 1984
Scale: 1:50,000
N.T.S. 92F/13E
Figure 2

The Quinsam Granodiorite outcrops across the northern part of the claim and the Batholith is part of the Jurassic Island Intrusions. The contact with the volcanics and limestone has an overall East south easterly trend but is locally complex with dykes of granodiorite intruding the country rocks. Skarns (unit 3) have formed near the contact, often, but not always, adjacent to the limestone, and in the volcanics close to limestone. The Skarns are fine to medium grained, consisting of garnet, clinopyroxene and epidote with local development of magnetite in poorly defined bands, occasional pyrite and rare chalcopyrite.

The following grab samples were analysed:

		Cu ppm	Ag ppm	Au ppb
QL7A	clinopyroxene, garnet, magnetite, epidote, sphalerite, chalcopyrite skarn	0.29%	2.1	40
QL24A	garnet, epidote, magnetite skarn with quartz, calcite, chalcopyrite veinlet	2.5%	8.9	235
QL30A	altered volcanic with epidote, chalcedony veinlets	24.0	0.1	5
QL31A	magnetite skarn with weak malachite possibly due to trace chalcopyrite in quartz veinlets	0.27%	2.9	100
QL32A	non magnetic pyroxene-epidote skarn adjacent to QL31A	895.0	0.5	10
QL33A	vuggy magnetite, epidote skarn with sphalerite, quartz crystals in vugs	58.0	0.9	30

All the occurrances of magnetite skarn that were found were small, generally 1 to 3m in width, within larger zones of garnet clinopyroxene-epidote skarn. The copper mineralization was in widely spaced small pods less than ½m diameter within the magnetite skarn. The largest area of skarn development is in the northwestern part of the claim where the granodiorite crosscuts the volcanic/limestone contact. There skarns occur along the contacts of all three lithologies and also scattered within a patch of volcanic which is otherwise weakly carbonate altered. Further to the west where granodiorite is in contact with volcanics alone, large angular blocks of partly assymilated volcanic lie within the granodiorite and the volcanic wallrock has only minor skarnification.

A zone of strongly altered volcanic on a shear zone was found west of Sihun Creek. The basalt was altered to friable brown rock and to clay in the centre of the zone. Sample QL16A contained 180 ppm Cu, 0.3 ppm Ag and 3 ppb Au.

Zones of propylitic alteration occur in places in the granodiorite, but no sulphides were seen associated and no samples taken.

CONCLUSIONS

The southwestern two thirds of the Bold 2 Claim covers basalt flows of the Karmutsen Group which are overlain by Quatsino Limestone, exposed on a hill in the north eastern half of the claim. The basalts and limestones are crosscut by the intrusion of the Quinsam Granodiorite across the northern part of the claim. Skarns developed in the volcanic and limestone adjacent to the intrusion but zones of magnetite skarn are small and pods of chalcopyrite mineralization restricted. Gold and silver values are associated with copper assays but are low. A ground magnetic survey would determine if there is any extensive development of magnetite skarn along the buried volcanic-limestone contact up dip of the intrusive contact. The claim should be reduced to 12 units (3S X 4W) as no mineralization is associated with the basalts of the southern part.

APPENDIX 1

ACME ANALYTICAL LABORATORIES LTD.
652 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED JUN 14-84

DATE REPORTS MAILED June 21/84

GEOCHEMICAL ASSAY CERTIFICATE

JUN 25 1984

A .50 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL:HNO3:H2O AT 90 DEG. C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : CU AG AU*
SAMPLE TYPE : ROCK - CRUSHED AND PULVERIZED TO -100 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACHED, MIBK EXTRACTION, AA ANALYSIS.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

BRINCO MINING PROJECT# 8117-00 FILE# 84-1104 PAGE# 1

SAMPLE	CU PPM	AG PPM	AU* PPB
QL-7A	2900	2.1	40
QL-16A	180	.3	5
QL-24A	25000	8.9	235
QL-30A	24	.1	5
QL-31A	2700	2.9	100
QL-32A	895	.5	10
QL-33A	58	.9	30

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. PH:253-3158 TELEX:04-53124

ICP WHOLE ROCK ANALYSIS

A .1000 GRAM SAMPLE IS FUSED WITH .60 GRAM OF LIBO2 AND IS DISSLOVED IN 100 MLS OF 5% HNO3.

SAMPLE TYPE - ROCK

DATE RECEIVED JUNE 14 1984 DATE REPORTS MAILED June 21/84 ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

BRINCO MINING PROJECT # 8117-00 FILE # 84-1104

SAMPLE #	SIO2 %	AL2O3 %	FE2O3 %	MGO %	CAO %	NA2O %	K2O %	TIO2 %	P2O5 %	MNO %	CR2O3 %	LOI %	SUM	Equivalent $CaCO_3$
QL-25A	1.41	.30	.70	.17	54.42	.01	.14	.01	.05	.02	.01	42.4	99.68	97.44
QL-26A	.96	.01	.39	.07	54.65	.06	.07	.01	.02	.02	.01	43.0	99.37	98.19
QL-29A	1.22	.20	.85	.15	53.90	.07	.08	.02	.12	.02	.01	42.9	99.57	96.61
QL-34A	.50	.03	.65	.15	56.10	.07	.08	.01	.15	.03	.01	43.2	101.01	99.04
STD SO-4S	58.42	10.44	3.29	.97	1.61	1.27	2.00	.60	.17	.13	.06	11.5	100.49	2.87

APPENDIX 2

BOLD 2 CLAIM ITEMISED COST STATEMENT

Operator: Brinco Mining Ltd.

Geological fieldwork June 6 - 11, 1984

Geologist	5 days @ $145/day	$ 725.00
Food & Accom.	5 days @ $ 55/day	275.00
Vehicle	5 days @ $ 35/day	175.00
	fuel & maintenance	50.00
Field Supplies		50.00
Base Map		50.00
Assays		
	7 rock samples analysed for Au Ag CU @ $9.50/sample	66.50
	4 whole rock analysis, 12 oxides @ $22.75/sample	91.00
Travel B.C. Ferries		36.00
Report & map preparation		400.00
	TOTAL	$1,918.50

APPENDIX 3

Statement of Qualifications

I, Ian A. Lyn, of 32B West 11th Street, Vancouver, BC hereby certify that:

1. I received a Bachelor of Science degree in geology from the University of Toronto in 1978.

2. I am a member of the Canadian Institute of Mining and Metallurgy, and associate of the Geological Association of Canada.

3. I have been employed by Brinco Mining Limited since 1978.

Ian Lyn

Ian A. Lyn

BOLD 2 CLAIM
(55x4W)
Staked - Sep. 23/83
Legal Corner Post

LEGEND

5D Greenstone Dykes

JURASSIC

4 Granodiorite

4A Propylitic Alteration

3 Skarn (Epidote, Garnet, Magnetite)

UPPER TRIASSIC

2 Quatsino Formation: limestone

1 Karmutsen Formation: basalt, pillows, flows

1A Altered, partial skarnification.

- lake
- stream
- logging road / trail
- claim boundary with post
- outcrop / small outcrop
- contact
- bedding
- attitude of contact
- ▲QL-1A rock sample location with nomenclature

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,003

Figure No. 3

Brinco MINING LIMITED

BOLD CLAIM
GEOLOGY

N.T.S. 92F/13 (Upper Campbell Lake)

Scale: 0 50 100 150 200 metres 1:5,000

Drafted by: I.L., H.H.
Date: Nov., 1984
Compilation: I. Lyn

RPT. No. 637