Geological Assessment Report

on a portion of the

HIDDEN CREEK GROUP
(Gilt #2 Claim)

situated

5.5 air kilometers Northeast of

Spuzzum, B.C.

New Westminster Mining Division

N.T.S. 92H/11W

Latitude 49°42'N Longitude 121°22'W

for

AQUARIUS RESOURCES LTD

Field Work from June 16 - 17, 1982

Report by

D. G. Cardinal, P. Geol., and B. P. Fowler, B.Sc. (Geol.) November, 1982





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#### PREAMBLE

The field work on the Gilt #2 mineral claim was supervised by Mr. B. P. Fowler, Assistant Junior Geologist for Aquarius Resources Ltd. This assessment report was also written by Mr. Fowler.

All the work carried out, including the assessment report was under the guidance of Mr. Dan Cardinal, P. Geol., Project Geologist for Aquarius Resources Ltd.

Daniel Cardinal, P. Geol.,



#### INTRODUCTION

The Gilt #2 is a single unit 2-post mineral claim situated on a large ridge separating the Fraser and Anderson Rivers approximately 5.5 air kilometers northeast of Spuzzum, B. C.

The general area is referred to as the "North Coquihalla Gold Belt", a thin belt of sedimentary rock (Ladner Group) where numerous lode and placer gold occurrences have been noted and worked with varied degrees of success (eg. Siwash Creek, Emmigrant, Hidden Creek, Pride of B. C.).

Aquarius Resources' Hidden Creek Group (which includes the Gilt #2) and Spuzzum Group occupy a 22 km strip of the North Coquihalla Gold Belt.

The following report describes a detailed mapping and prospecting program carried out on the Gilt #2 mineral claim on June 16 and 17, 1982. The field crew consisted of one junior geologist and one prospector.

The goal of this program was to evaluate the



property in terms of gold mineralization and to fulfill assessment work requirements as put forward by the B. C. Department of Mines.



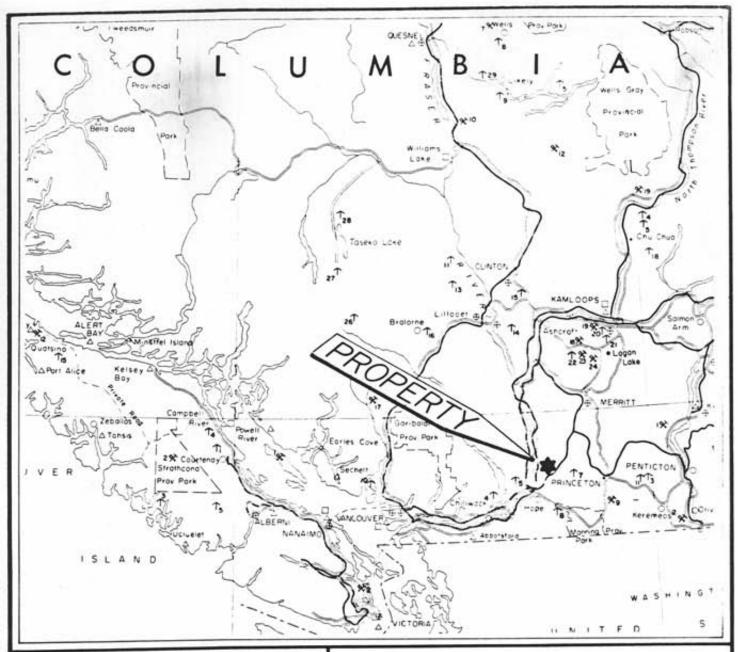
#### LOCATION AND ACCESS

The Gilt #2 claim is located 5.5 air kilometers northeast of Spuzzum, B. C. (Latitude 49°41'45"; Longitude 121°22'30").

Access is via the Hidden Creek logging road, which empties onto the Trans Canada Highway #1, 2 km north of Spuzzum. One turns off this road at  $1\frac{1}{2}$  miles (2.5 km) onto Gilt Creek logging road for a distance of 5 km. The claim is located immediately west of the intersection of this road and the B. C. Hydro right of way. All roads are in relatively good driving condition, but warrant 4 x 4 transportation.

The N.T.S. map sheet for the area is 92H/11W.









## AQUARIUS RESOURCES LTD.

# HIDDEN CREEK GROUP

Gilt #2 Claim Gilt Creek area, B.C. New Westminster Mining Division 92H/11W.

0 10 20 30 40 50

100

150 miles

SCALE 1 inch = 50 miles

LOCATION MAP

Figure 1

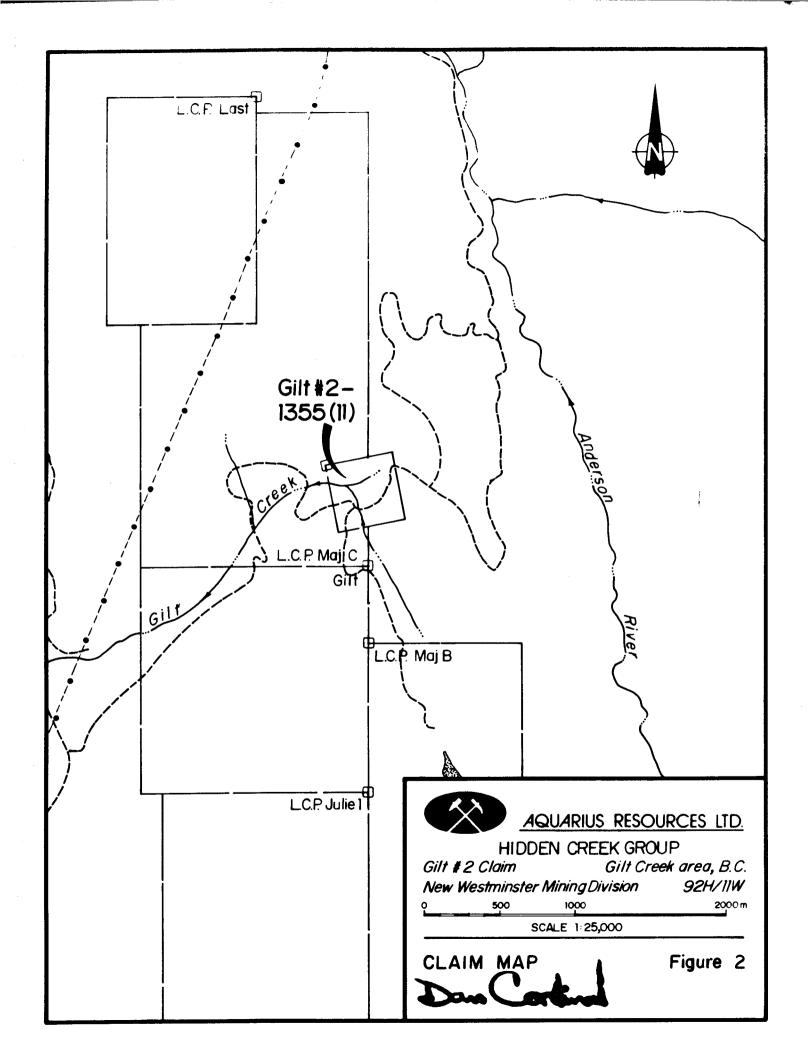
## PROPERTY INFORMATION

The Gilt #2 claim is situated within the New Westminster Mining Division and is now recorded as a portion of the Hidden Creek Group. The following table lists all pertinent information.

CLAIM NAME			ANNIVERSARY DATE	EXPIRY DATE
Last	6	223	August 22	1985
Maj C	18	316	August 11	1983
Gilt	9	510	June 25	1985
Maj B	16	319	August ll	1983
Mike 1-8	8	593-600	September 20	1983
CG 1-4	4	601-604	September 20	1983
Mag A	12	267	February 16	1986
Spuz D	12	314	August 11	1986
Julie	4	723	November 27	1983
Gilt #2		1355	November 19	1985*

Note: \* After assessment work credits applied for





#### HISTORY

The earliest recorded work within the claim area is documented in the 1912 Minister of Mines Annual Report:

"On the divide between the Fraser River and Anderson Creek, nearly opposite Spuzzum, Foulk and the Macdonald Bros. have discovered what they consider is the continuation of the Hidden Creek ledge.

They and associates have located a number of claims, and active prospecting work is being carried on".

"The outcroppings are very rich in free gold. They are now tunneling into the lead, which they expect to strike in the course of a month or two, and should it prove that the ore is as rich at depth at which the tunnel strikes the lead as on the surface, it will be proven to be a rich property".

In the 1916 Annual Report, the property is referred to as the "Pride of B. C. Group, located at the head of a small creek, known locally as Gold Creek at an elevation of about 1600 ft. above the Fraser River". Work to this date included a "cross cut adit driven 80 ft. in length which exposed a very narrow fissure filled with barren looking quartz 60 ft. from the portal. A second adit had been started in a big rock slide about 250 ft. northerly from that just mentioned. This was 18 ft. in length and was close timbered, as solid rock had not been reached".



The 1917 Annual Report states "Medonald and the Miller Mining Partnership have had a small crew at work all season and intend continuing until they cut their lead on the Admiral Group".

Lastly, the 1918 Annual Report states "The Gold Creek Mining and Development Company Ltd., which owns mining property near Spuzzum, is continuing development work under the management of A.A. Macdonald, who recently reported the opening up of good milling ore".

The above mentioned workings are still observed today, though rotten timbers and sloughing makes closer examination unsafe. A grab sample (G-3) obtained from the dump of the northern most workings (No. 1 tunnel) revealed 0.01 oz/ton silver and 0.002 oz/ton gold.

It is not known when the property was allowed to lapse, but it was restaked as the Gold Creek #1 on April 1, 1973, by Mr. R. E. Hurley. Mr. Hurley kept the property in good standing until April 5, 1981, though the nature of assessment work performed during this period of ownership is not known.



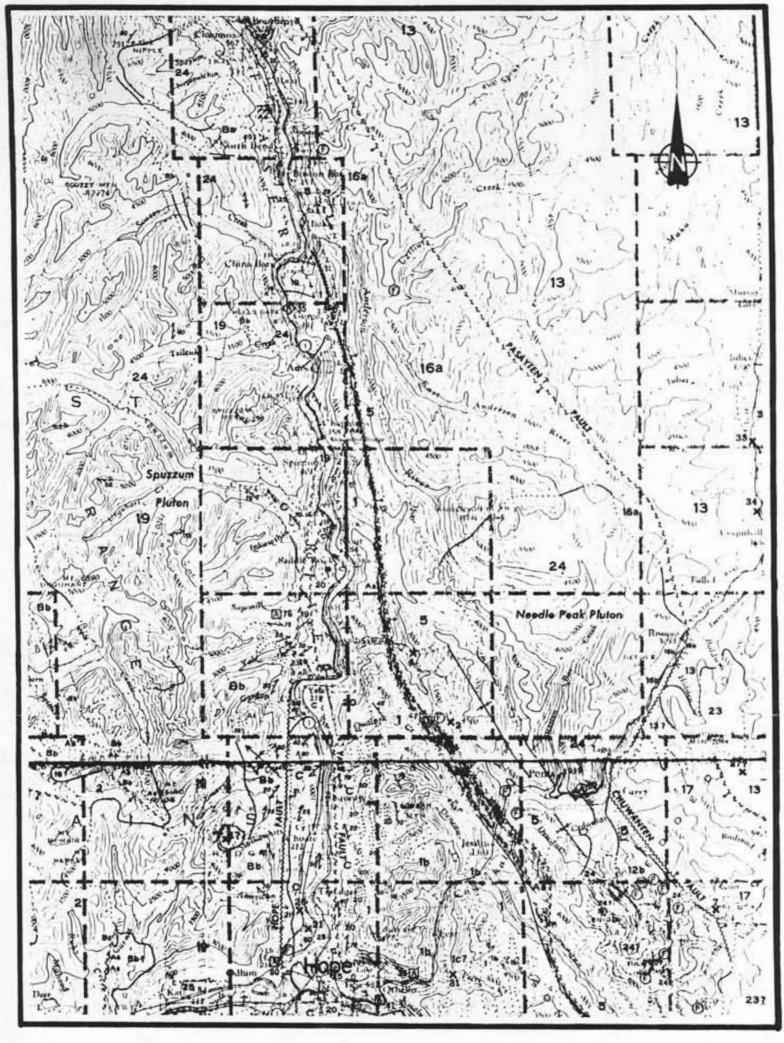
#### REGIONAL GEOLOGY

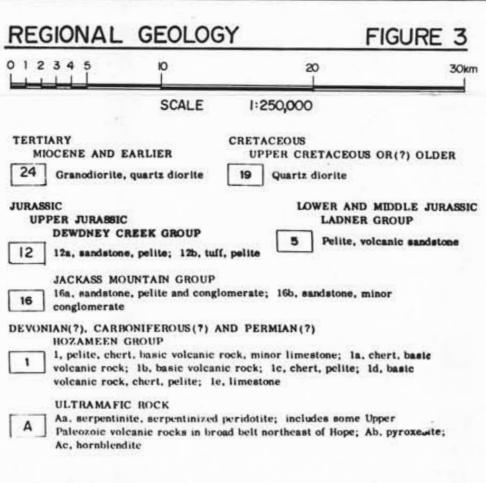
The regional geology of the area has been mapped by J.W.H. Monger (G.S.C. Paper 69-47) (Fig. 3) and illustrates the overall geology of the claim area.

The Gilt #2 claim is entirely underlain by Lower
Middle Jurassic pelites and lithic wackes of the Ladner
Group. The Hozameen Fault separates the Ladner Group from
the Hozameen Group, a complex package of greenstone, chert,
and pelites believed to be of Late Paleozoic age. This
structure trends in a north-south direction approximately
1 km west of the property.

The Hozameen Fault and Ladner Group occur along the south western boundary of the Intermontaine Belt, a lithological and structural province of the Cordillera.







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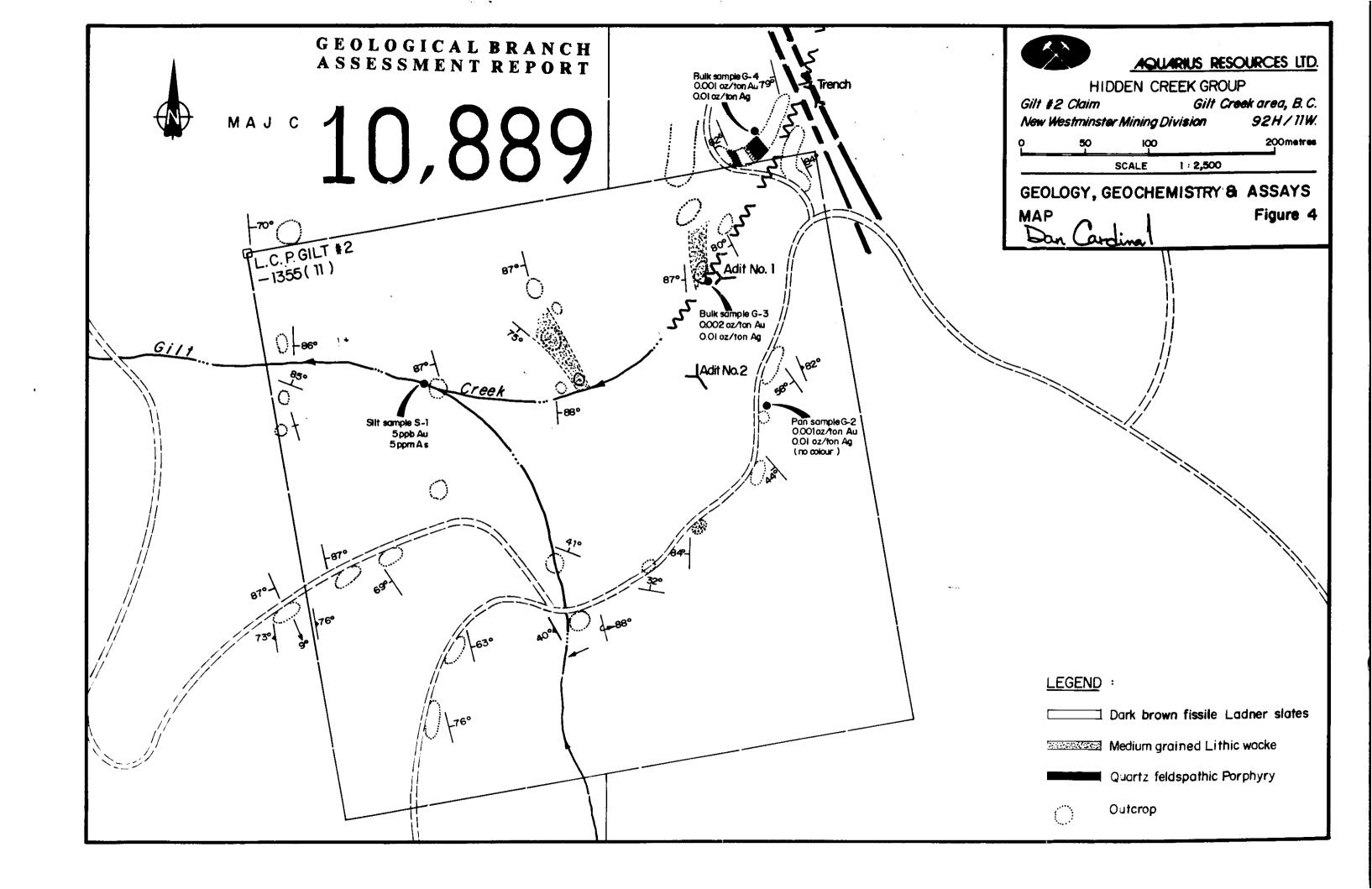
#### FIELD PROCEDURES

Field geology was mapped utilizing a 1:5000 scale topographic base map. Control was provided by the combined use of an altimeter and compass and chained traverse lines.

Two bulk rock samples (G-3 & G-4) were collected and shipped to Min En Labs Ltd. of North Vancouver, B.C. and analyzed for gold and silver content. Two gozzan samples (approximately 2 kg samples) were also collected and panned for gold.

All filed data and sample locations are presented in Fig. 4 .





#### OBSERVATIONS AND RESULTS

The claim area is almost entirely underlain by dark grey to black siliceous slates and argillites of the Ladner Group. Lenses of a medium grained lithic wacke up to 5 m thick occur within the east half of the property. These wackes are typically a moderately fractured, dark grey-green siliceous unit which has been strongly chloritized. No wacke unit was observed to be continuous along strike for more than 100 m.

The overall structural trend of the sediments is NNW-SSE, dipping steeply east and west. A fairly strong slatey cleavage occurs, usually parallel to bedding. A weaker fracture cleavage was noted in places, generally opposite to bedding. This is indicative of intense folding and overturned bedding in some areas.

Tight kink folding occurs along the road section near the western claim boundary. Fold axes trend and plunge 9° at 155° Azimuth. Topography and proximal sheared outcroppings indicate a NNE-SSW fault occupying Gilt Creek, just west of the old workings.



Thin (3-5 m) quartz feldspar porphyry dykes accommodating the overall structural trend were observed near the NE corner of the claim. This dyke material is highly oxidized and exhibits moderate hydrothermal alteration.

Along with abundant quartz veining, secondary chlorite and epidote occur in moderate amounts. These quartz veins were reported to be auriferous and the target of all past exploration work.

Mineralization and Possible Controls

Mineralization observed on the property is confined mainly to the felsic dykes. Hydrothermal in nature, the main period of mineralization occurred during and/or after the intrusive event. Disseminated pyrite cubes (up to 2 mm) occur in quantities up to 5% total composition. Abundant milky quartz veins (.5 cm to 5 cm) can be seen cutting the dykes, carrying very minor pyrite and chalopyrite. Other hydrothermal minerals present include secondary chlorite, epidote, and minor sericite.

A one metre wide replacement zone was noted in the NE corner of the property along a dyke-slate contact.



This contact is the locus of intense silicification, with the development of pyrite in quantities up to 10%. A bulk rock sample (G-4) from this zone revealed 0.01 oz/ton Ag and 0.001 oz/ton Au.

A representative grab sample (G-3) from the dump of tunnel No. 1 assayed 0.01 oz/ton Ag and 0.002 oz/ton Au. Gozzan samples from 2 locations were panned and revealed no colours.

The sediments of the area are for the most part void of mineralization and quartz veining. This may simply be due to rock mechanics. Fine grained sediments tend to accomodate deformation stress by folding, while massive crystalline rock tends to fracture. Fractures in the dykes provided channels for ascending hydrothermal solutions and resulted in an interconnected network of quartz veining. The slates acted as an impervious barrier to these solutions and as a result very little quartz veining and associated metallic minerals developed.



#### CONCLUSION

No visible gold was observed on the property. The geochemical survey performed on a portion of the property by Aquarius Resources Ltd during the summer of 1979, (B.D.D.M. Assessment report # 7495) was not successful in outlining any areas anomalous in gold. Combined with the negative results of the 1982 program, it appears this property holds little potential for a gold deposit of significant size or grade.

Respectfully Submitted

Dan Cardina P. Geol.,

Brian P. Fowler, B.Sc. (Geol.)



#### APPENDIX I

#### BIBLIOGRAPHY

Annual Report of the Minister of Mines:

1912, pg. 184

1916, pg 262, 263

1917, pg 235

1918, pg 245

B. C. Department of Mines Assessment Report No. 7495

Monger, J.W.H.:

Hope Sheet, (west half)

1969

G. S. C. Paper 69-47



#### APPENDIX II

Certificate

I, Daniel G. Cardinal of the Municipality of Hope, British Columbia, do hereby certify that:

- I am a professional geologist residing in Hope, B. C., mailing address, P. O. Box 594, Hope, British Columbia, VOX 1L0
- 2. I am a graduate of the University of Alberta (1975) with a B.Sc. degree in Economic Geology and a graduate of the Northern Alberta Institute of Technology with a Geological Technologist diploma (1970)
- 3. I am a member in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and a member of the Canadian Institute of Mining and Metallurgy.
- 4. Since 1968, I have been actively involved in the Canadian mining industry both as a prospector and a professional geologist, and have assisted and instructed prospector's courses through the Department of Extension, University of Alberta.
- 5. I am presently employed by Aquarius Resources Ltd., as a permanent staff geologist to systematically carry out geological mapping, prospecting, geochemical, geophysical and diamond drilling programs.

Daniel G. Cardinal, P. Geol.



#### APPENDIX II

#### CERTIFICATE:

I, Brian P. Fowler of the Municipality of Hope, British Columbia, do hereby certify that:

- I am a Junior Geologist residing in Hope, British Columbia.
   Mailing address; P. O. Box 1464, Hope, British Columbia,
   VOX 1L0
- 2. I am a graduate of the University of Alberta (1981) with a B. Sc degree in Geology, specializing in petroleum.
- 3. I am a member in good standing with the Canadian Institute of Mining and Metallurgy.
- 4. Upon graduation, I have been employed in the capacity of Junior Geologist by Aquarius Resources Ltd., to aid in geologic mapping and geochemical surveys within the Coquihalla Gold Belt.

Brian P./Fowler, B.Sc. (Geol)



### APPENDIX III

ASSESSMENT WORK COSTS - June 16 & 17, 1982

## PERSONNEL

l Junior Geologist,		
2 days @ \$250/day		\$ 500.00
1 Geological Field Assistant,		
2 days @ \$250/day	• •	500.00
FIELD EXPENSES		
1 4 x 4 vehicle,		
2 days @ \$95/day	,	190.00
Room & Board,		
4 man days @ \$60/day		240.00
2 bulk rock assay, 1 silt sample		
@ \$19.25		57.75
REPORT PREPARATION		
Drafting, Typing, Repro, binding, etc		300.00
	\$	1,787.75

Respectfully submitted

B. P. Fowler, B.Sc. (Geol.)

D. G. Cardinal, P. Geol.



## MIN-EN LABORATORIES LTD.

705 WEST 15TH STREET, NORTH VANCOUVER, B.C. V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

# Certificate of Assay

TO: Aquar	920-475 Howe Street,  Vancouver, B.C.						
920-47							
Vancou							
SAMPLE No.		Au oz/ton					
30N-3W		.001					
25-2		.010					
G_3	l l	.002					
G-4		.001					
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