ASSESSMENT REPORT

ON A COMBINED (VLF) ELECTROMAGNETIC AND MAGNETOMETER SURVEY

ON THE

SOL CLAIM GROUP

(16 UNITS)

RECORD NO. 703(9)

ASPEN GROVE - TOMMY LAKE AREA

NICOLA MINING DIVISION

PRINCETON, BRITISH COLUMBIA

N. Lat. 49^o58'

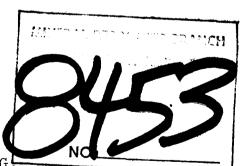
W. Long. 120°29'

for

ABATON RESOURCES LTD. 5316 Fleming Street Vancouver, B.C.



DONALD W. TULLY, P. ENG!

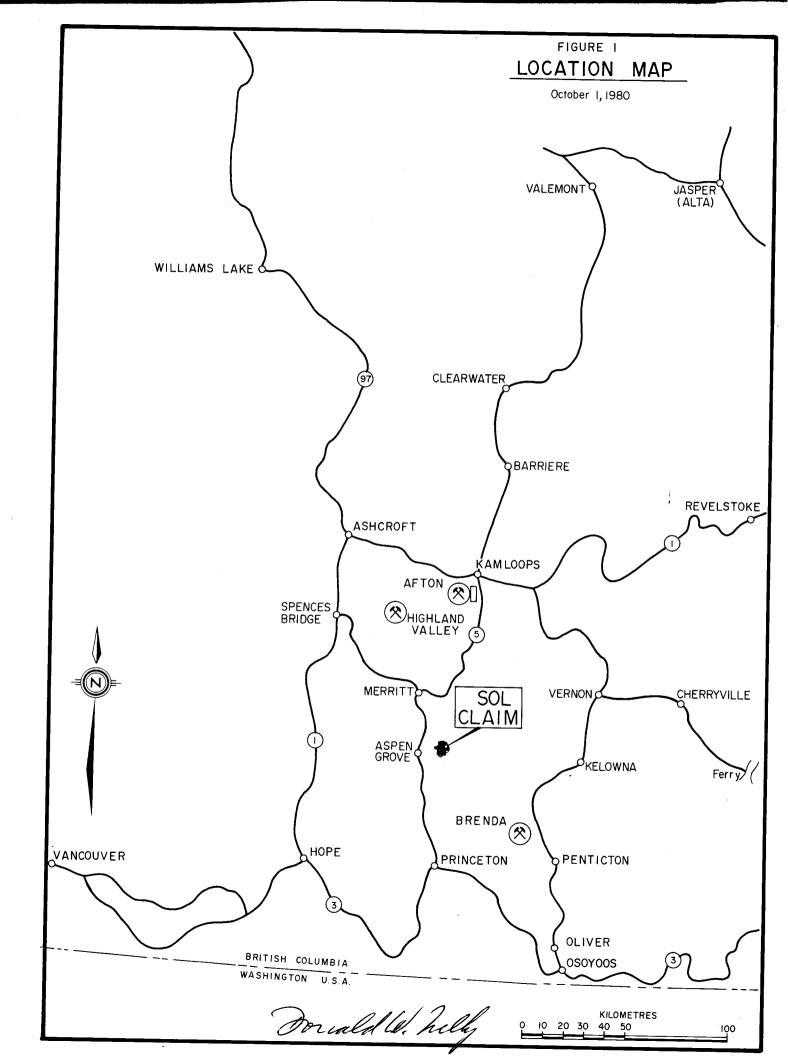


October 1, 1980

West Vancouver, B.C.

TABLE OF CONTENTS

	$\underline{\text{Page}}$
INTRODUCTION	1
SUMMARY AND CONCLUSIONS	1
PROPERTY - LOCATION, ACCESS, PHYSIOGRAPHY	2
CLAIMS	2
HISTORY - PREVIOUS DEVELOPMENT	3
REFERENCES	4
REGIONAL AND LOCAL GEOLOGICAL SETTING	5
MINERALIZATION - ASSAYS	6
RESULTS OF THE 1980 PROGRAM OF COMBINED (VLF) ELECTROMAGNETIC AND MAGNETOMETER SURVEYING	9
BULLDOZER TRENCHING	9
TIME-COST DISTRIBUTION	10
CERTIFICATE	11
ASSAY CERTIFICATE #8008-2955(End	of Report
MAPS	
Figure 1 - Location Map(Fr	ontispiece)
Figure 2 - Topographic Plan (after 92H/15E-16W)(Follow	ing page 1)
Figure 3 - Claim Plan (after M92H/15E-16W)(Follow)	ing page 2)
Figure 4 - Regional Geology (after GSC Map 888A)(Follow)	ing page 4)
Figure 5 - Plan showing (VLF) Electromag- netic and Magnetometer Read- ings	(In pocket)
Figure 6 - Plan showing (VLF) Electromag- netic Profiles and Isomagnetic Contours	
Figure 7 - Sketch of Bulldozer Trenchings. (Follow	



INTRODUCTION

This Assessment Report was prepared pursuant to a request from the Directors of ABATON RESOURCES LTD., 5316 Fleming Street, Vancouver, British Columbia.

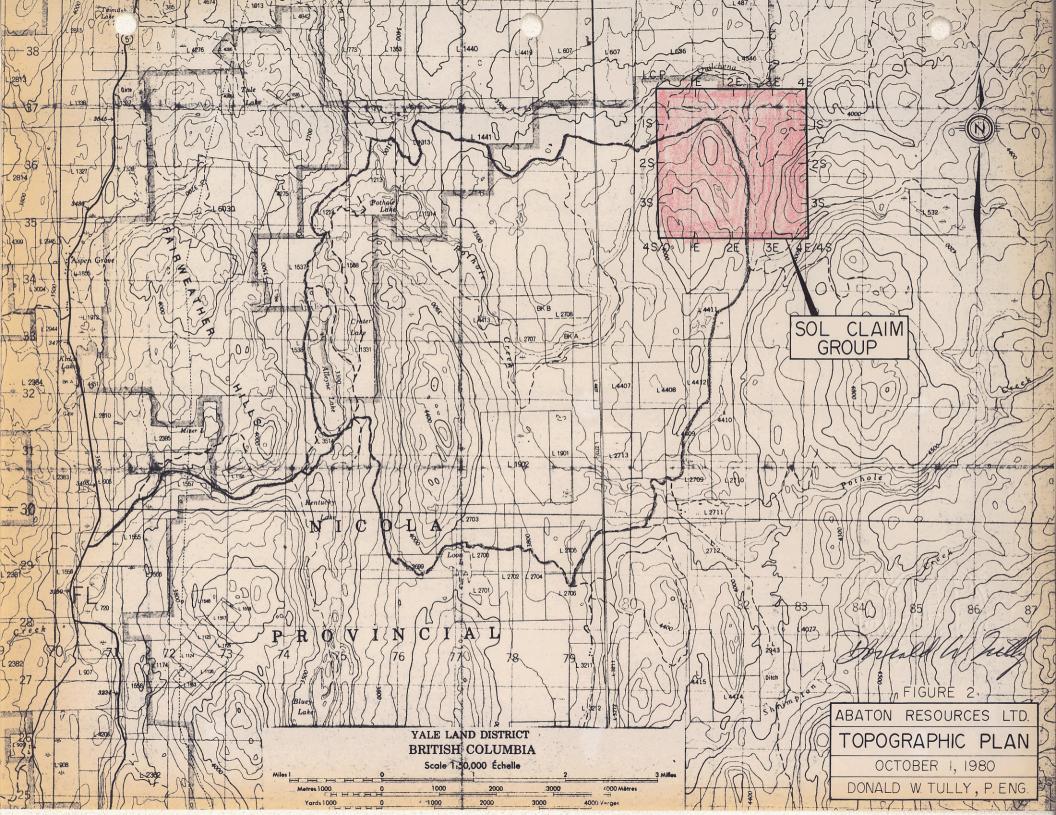
The purpose of this report is to summarize and evaluate the results of a combined (VLF) electromagnetic and magnetometer survey done on the SOL claim area in the periods February 21-24, March 20-April 3, 1980 and April 20 through May 5, 1980. A program of bulldozer trenchings on the mineral showing of the former Skeena Silver Mines in the claim area is also reported.

Further mineral exploration work to afford closer target definition prior to a proposed diamond drill test is recommended.

SUMMARY AND CONCLUSIONS

The SOL claim area comprises sixteen units, located southeast of Merritt, British Columbia in the Aspen Grove-Tommy Lake area (Figures 1 and 2).

A combined (VLF) electromagnetic and magnetometer, survey using Ronka EM-16 and Coni-Mag magnetometer instruments was done by P. Mooney and M. Mooney, P.O. Box 2027, Kelowna, British Columbia, during the periods February 21-24, March 20-April 3, and April 20 through May 5, 1980. Detail surveying was done in the areas of interesting instrumental response during April 20-May 5, 1980. Bulldozer work was done by Abaton Resources Ltd. during the period June 23 through July 27, 1980 to better expose the magnetite-copper skarn zone on SOL unit 2E -2S (Figure 7).



The electromagnetic and magnetometer surveys showed two zones of apparent electromagnetic conductors that warrant further target definition. Magnetic relief over the claim area was found to be in the order of 1,500 gammas.

PROPERTY - LOCATION, ACCESS, PHYSIOGRAPHY

The property is located about eleven kilometres east of the Hamlet of Aspen Grove, British Columbia.

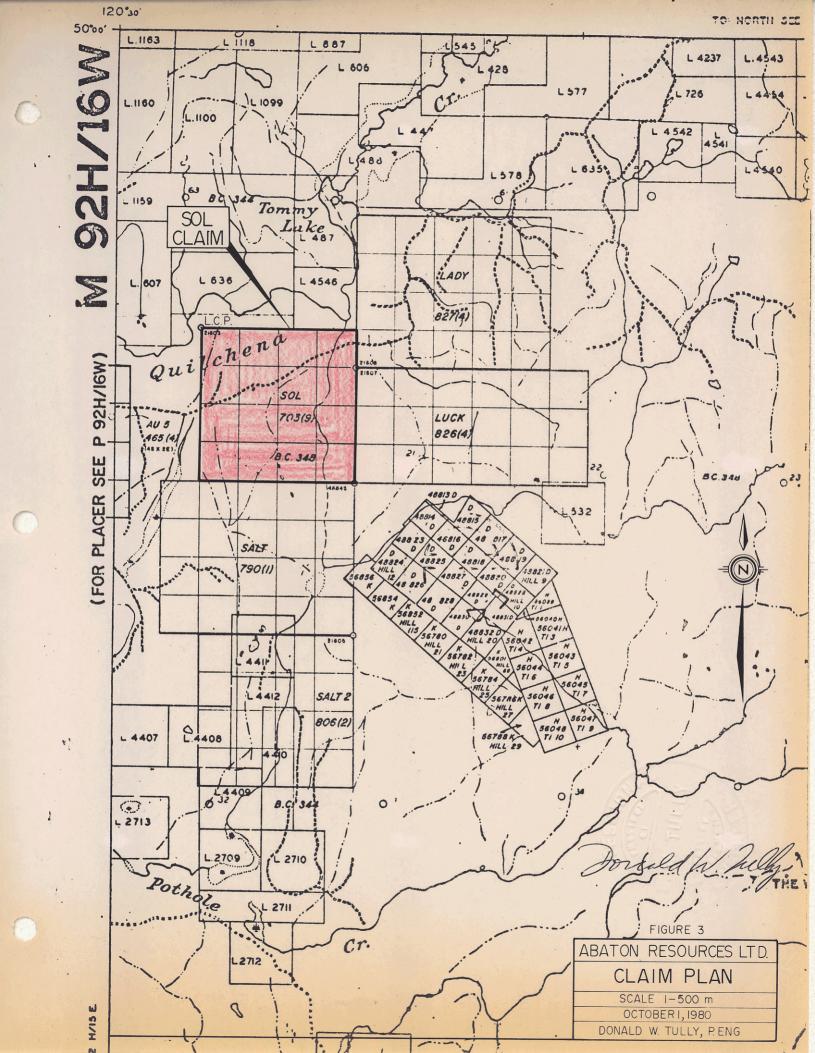
Road access is available to the ground from a point about five kilometres south of Aspen Grove on Highway 5, thence a road distance of about twenty-six kilometres to the claim area. An alternate west road route of about twenty-one kilometre distance is also possible (Figure 2).

The valley of Quilchena Creek lies a few hundred metres north of the claimed ground. A small pond is located about a claim west of the road which traverses along the east portion of the property in a north-south direction. This water should meet any immediate industrial needs.

Elevations vary from about 3,600 feet above sealevel to some 4,200 feet over the ground. Second-growth forest of spruce, pine, fir, poplar and brush cover the claim area.

CLAIMS

The SOL claim consists of 16 units located in the Nicola Mining Division, Tommy Lake-Aspen Grove area, British Columbia. Information on file with the British



Columbia Ministry of Energy, Mines and Petroleum Resources was as follows:

		Record Number	Date Recorded	Recorded Holder		
SOL	16	703(9)	September 4, 1979	Malcolm Mooney		

The claim is shown on B.C. mineral claim map M92/H - 16W (Figure 3).

HISTORY - PREVIOUS DEVELOPMENT

In 1961, the ground held by the present SOL claim was claimed by the WEN 1-14 and HN 1-18 and held by Skeena Silver Mines Ltd. At that time some 7,200 feet of stripping was done. In 1962, more bulldozer stripping was performed, an electromagnetic survey was done and nineteen short diamond drill holes were done totalling 3,989 feet. The showings were said to consist of skarn containing chalcopyrite and magnetite. In 1962, the claimed ground was held by the Malachite 1-14 and the Chalcocite 1-18 mineral claims. eral major mining companies had already optioned this ground and a report by one of them indicated the best diamond drill intersection from the diamond drill hole results was 1.62 percent copper across a core length of 20 feet. No indication of the gold and silver content was given but the intersection of copper was said to contain 50% or more of magnetite with pyrite in a skarn host rock.

Skeena Silver Mines subsequently became Consolidated Skeena Mines and did geochemical and geophysical surveys in 1968 (Figure 5). Four geochemical anomalies of significance were reported. Apparently the magnetometer survey work was inconclusive but the induced polarization survey by Barringer Research Limited was reported by W.M. Sharp, P.Eng., (Deceased) to have indicated several important zones of anomalous response reflecting a considerable content of disseminated pyrite in underlying volcanic rocks.

According to the area claim plans the ground occupied presently by the SOL claim has been staked several times since the last available record of work in 1969.

REFERENCES

Reports and publications pertinent to the ground now held by the SOL claim are as follows:

- Minister of Mines and Petroleum Resources Annual Report for 1961, p-46
- Minister of Mines and Petroleum Resources Annual Report for 1962, p-59
- B.C. Ministry of Energy, Mines and Petroleum Resources Assessment Reports
 - No. 1049 Geochemical Survey dated August, 1967
 - No. 1089 Airborne Geophysical Survey and Ground Geochemical Survey dated October 15, 1967
 - No. 1586 Geological, Geophysical and Geochemical Surveys dated July 26, 1968
 - No. 1718 Induced Polarization Survey MAL-CHAL Group, Aspen Grove Area, B.C., by Barringer Research Limited, dated October 1968
 - No. 1953 Line-cutting: report dated May 15, 1969
- Geological Survey of Canada Memoir 243 by H.M.A. Rice
- Report by W.M. Sharp, P.Eng., (Deceased) dated January 15, 1969 entitled "Summary Report 69-1, Geological-Geochemical-Geophysical Exploration, Tommy Lake, Boot Lake Area, Nicola M.D.
- Summary Report on Geological, Geochemical and Geophysical Investigations of the Tommy Lake-Paradise Lake Property for Consolidated Skeena Mines Ltd. (NPL) by W.M. Sharp, P.Eng., dated July 25, 1968

DON TULLY ENGINEERING LTD.
SUITE 102 - 2222 BELLEVUE AVENUE
WEST VANCOUVER. BRITISH COLUMBIA
V7V 1C7

REGIONAL AND LOCAL GEOLOGICAL SETTING

The area is underlain by Nicola volcanics in the west contact zone of the Pennask Pluton. The trend of the rocks is slightly west of north. The main structural feature is a synclinal axis lying a few kilometres to the west of the claim area (Figure 4).

A tentative timetable of geologic events for the SOL claim area is as follows:

<u>Formation</u>		Age		
Sand, gravel and	Unconsolidated	Quaternary		
loam	(Erosional unconformity)			
Mineralization Metamorphism and	Sulphides and oxides of copper and iron	Tertiary (?)		
hydrothermal alteration	Skarn-type rocks			
	(Faulting, folding and intrusive activity attendant to the Pennask Pluton)	Post Jurassic		
Pennask Pluton Complex	Granodiorite and monzonite	Jurassic		
	(Faulting, folding and related tectonic activity)			
Nicola Volcanics	Basalt, andesite and associated volcanic fragmental phases, pelitic sediments and minor conglomerate	Upper Triassic		

MINERALIZATION - ASSAYS

The principal mineral showing occurs in the area of SOL claim unit 2E - 2S (Figure 3). The host rock is skarn composed of epidote, garnet and altered volcanic carrying disseminated pyrite, minor chalcopyrite, magnetite, chalcocite and malachite.

The writer obtained a surface sample of skarn when examining the bulldozer trenchings on August 26, 1980 which showed considerable disseminated pyrite and sparse grains of chalcopyrite, malachite stain and magnetite. This grab sample assayed 0.010 ozs Gold, 0.10 ozs Silver, and 0.20% Copper. Detail magnetometer surveying on a grid of 1:10 would be necessary to outline this mineral showing.

The trend of the underlying rock formations is exemplified by the isomagnetic contours over the claim area (Figures 4 and 6).

RESULTS OF THE 1980 PROGRAM OF COMBINED (VLF) ELECTROMAGNETIC AND MAGNETOMETER SURVEYING

Period - Personnel

The survey was carried out during the period February 21 - 24, March 20 - April 3 and April 20, through May 5, 1980 by P. Mooney and M. Mooney, Post Office Box 2027, Kelowna, British Columbia.

Survey Control

Survey control was by chain and compass commencing at the Legal Corner Post of the SOL mineral claim lo-

cated at the northwest corner of the claim. Survey lines were run in an east-west direction and a baseline for magnetometer base station readings was established in the centre of the claim in a north-south direction. Survey stations were marked along each line at 50-metre intervals with red flagging according to the position of the station location.

In-phase and out-of-phase (quadrature) readings and magnetometer readings were taken at each station location. Magnetometer readings were taken at the base stations and used to make diurnal corrections to the magnetometer readings taken each day.

Each person of the two-man crew carried an instrument at either end of the chain during the survey.

A total of 29.6 line-kilometres of survey were completed. Initially ten lines were run east-west over the claim area at 200 metre intervals. Those areas where interesting instrumental response was encountered were done at fifty-metre intervals.

(VLF) Electromagnetic Survey

A Ronka EM-16 electromagnetic instrument No. 89 was used during the survey. The readings are shown on Figure 5. The profiles are plotted on Figure 6.

A study of the results shows two zones of apparent electromagnetic conductors were found, namely ZONE "A" and ZONE "B" (Figure 6). These zones trend north-north-easterly through the claim area.

ZONE "A" extends northerly from the south bound-

DON TULLY ENGINEERING LTD.
SUITE 102 - 2222 BELLEVUE AVENUE
WEST VANCOUVER. BRITISH COLUMBIA
V7V 1C7

ary of the SOL claim at L2000S - 50W northward through L1800S - 100W, 50E. This zone appears to be a complex of short-length conductors.

ZOBE "B" trends northeasterly through the north central part of the claim from L750S at the Base Line through L300S - 350E. This zone appears to have a complex of north-west striking conductors occurring tangential to the north-northeast trend of the "B" ZONE.

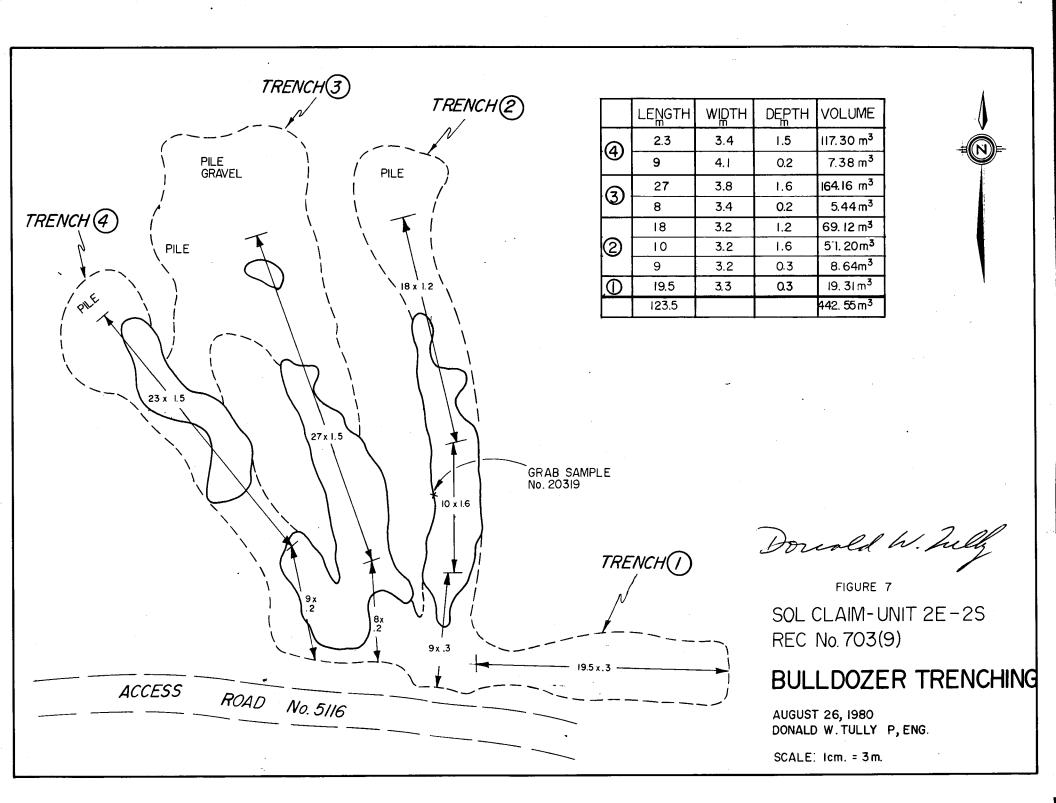
Further target definition of the "A" and "B" ZONES is recommended.

Magnetometer Survey

A Coni-Mag Magnetometer instrument No. 00147 was used during the survey. The readings are shown on Figure 5.

The results of the magnetometer survey readings were isomagnetically contoured at 200 gamma intervals on Figure 6. A series of small magnetic "highs" occur along a north-south trend in the west central sector of the property in the area of L950S between L600S - L1400S at 400W. Magnetic "lows" trend north-northeasterly more or less subparallel to general magnetic trend over the claim area.

The magnetic relief varied between 17,200 and 19,000 gammas.



BULLDOZER TRENCHING

Four trenches were dug in earth and broken bedrock using a D6C size bulldozer by Abaton Resources Ltd. on S0L unit 2E - 2S (approximate position) as shown on Figure 7. The four trenches showed skarn alteration and some fine pyrite and copper mineralization with associated malachite stain. Grab sample #20319 was taken from this mineralized zone.

The volume of earth and rock dug from the four bulldozer trenches was as follows:

		3
Trench #1		19.31 m ³
Trench #2	_	128.96 m ³
Trench #3	_	169.60 m ³
Trench #4	-	124.68 m ³
		
${ t Total}$	-	442.55 cubic metres

The bulldozer work was done in the period June 23 through July 27, 1980.

TIME-COST DISTRIBUTION

The contract cost of the combined (VLF) Electromagnetic and Magnetometer survey as submitted by Abaton
Resources Ltd., 5316 Fleming Street was \$ 6,152.00

The cost of the bulldozing was filed as follows:

442.55 cubic metres of trenching @ \$15.00/cubic metre

\$ 6,638.25

Respectfully submitted,

Donald W. Tully, P. Eng.

October 1, 1980

CERTIFICATE

I, DONALD WILLIAM TULLY, of the City of West Vancouver, Province of British Columbia, hereby certify as follows:

- 1) I am a Consulting Geologist with an office at Suite 102, 2222 Bellevue Avenue, West Vancouver, B.C.
- 2) I am a registered Professional Engineer of the Provinces of British Columbia and Ontario.
- 3) I graduated with a degree of Bachelor of Science, Honours Geology, from McGill University in 1943.
- 4) I have practiced my profession for thirty-five years.
- 5) I have no direct, indirect or contingent interest in the shares of Abaton Resources Ltd., or the SOL Mineral Claim, subject of this report, nor do I intend to have any interest.
- 6) This report dated October 1, 1980, is based on personal field examinations I made February, March, June and August 1980, and from information gathered from available maps and reports.

DATED at West Vancouver, Province of British Columbia, this 1st day of October, 1980.

DONALD W. TULLY, P. ENG. Consulting Geologist

Dound W. hely

General Testing Laboratories A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2

PHONE (604) 254-1647 TELEX 04-507514 CABLE: SUPERVISE



TO: DON TULLY ENGINEERING LTD. 102 - 2222 Bellvue Ave., W. Vancouver, B.C.

CERTIFICATE OF ASSAY

8008-2955

DATE: Sept. 18/80

We hereby certify that the following are the results of assays on:

	GOLD	SILVER	Copper	XXX	XXX	200	300	2003
MARKED	oz/st	oz/st			***			
•	00,00	-	Cu (%)					
20319	0.010	0.10	0.20					
					•			
								; •
	-							

E. REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR.

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATE-MENTS. CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IN NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED.

R. NADEAU. Chemist

