DIAMOND DRILL PROGRAM REPORT
ON
TSULTON PROPERTY

NTS 92L/7W
NANAIMO MINING DIVISION
BRITISH COLUMBIA

FOR
INDUSTRIAL FILLERS LTD.

Vanguard Consulting Ltd.

Tel.: (604) 681-3234

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APPENDICES

1.1 INTRODUCTION

At the request of Hans Achermann for Industrial Fillers Ltd., a program of prospecting and diamond drilling has been completed on the Tsulton property by Vanguard Consulting Ltd. The Tsulton property was staked in August of 1987 so as to cover an area of fairly pure, white calcite which had been mapped by H. J. Brown for Pluess Staufer during 1984.

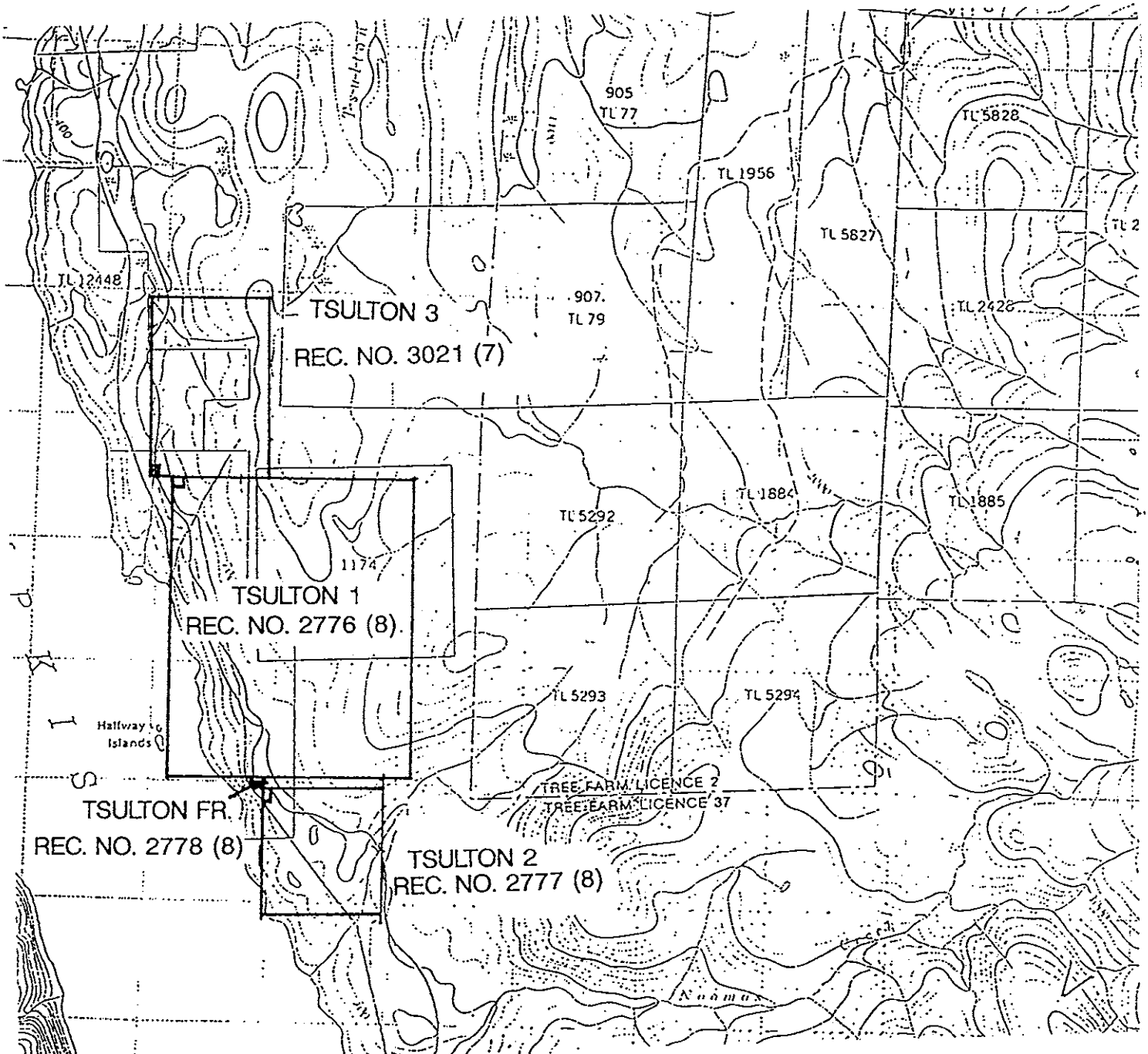
The property was examined by Achermann and Duncan G. Ogden for Industrial Fillers, and by David Coffin of Vanguard Consulting between June 15 and 19, 1988. The diamond drilling program was conducted between August 2 and August 10, 1988. Core logging and interpretation was provided for Vanguard Consulting by Cristian Soux. This report details the program and its results, and makes recommendations for further work.

1.2 PROPERTY STATUS

The property consists of three modified-grid system mineral claims and one fractional mineral claim totaling 31 units, located on title map 92L/7W in the Nanaimo Mining division. Particulars of the claims are as follows:

Claim Name	Record No.	Units	Expiry
Tsulton 1	2776(8)	20	25 Aug./88
Tsulton 2	2777(8)	4	25 Aug./88
Tsulton Fr	2778(8)	1	25 Aug./88
Tsulton 3	3021(7)	6	06 July/89

All of the claims are registered in the name of Industrial Fillers Ltd. The claims have been grouped as the Tsulton Group. This report will be filed for assessment credit.



Industrial Fillers Ltd.

THE TSULTON GROUP

CLAIM MAP

Nanaimo M.D. NTS 92L/7W

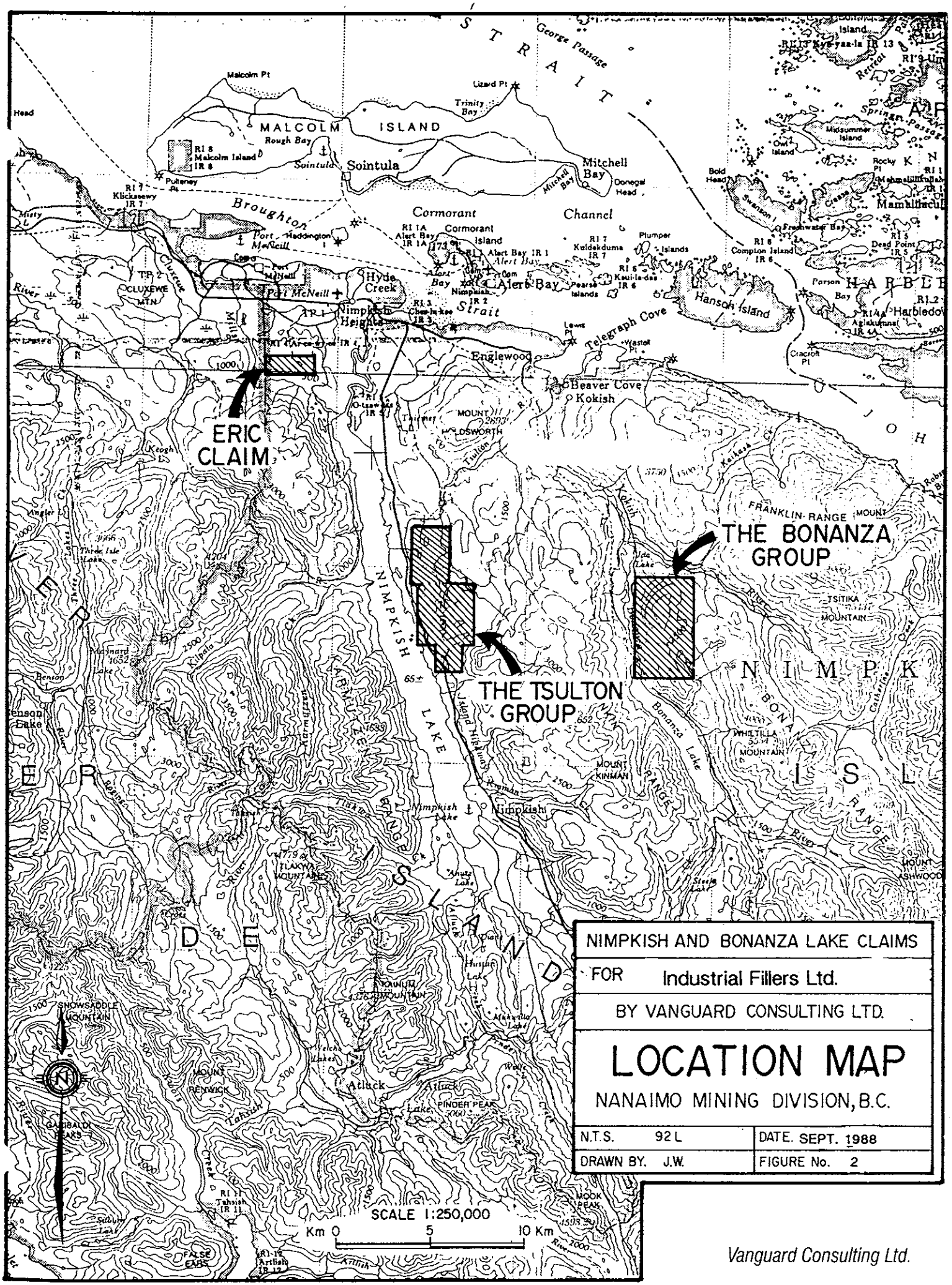
Metres 1000 0 1000 2000 3000

Yards 1000 0 1000 2000 3000

DATE:	SCALE:	COMPILED BY:	DRAWN BY:
August, 1988	1: 50,000	D.J.C.	E.P.C.

REVISED

Vanguard Consulting Ltd.


ERIC CLAIM
THE BONANZA GROUP
THE TSULTON GROUP
NIMPKISH AND BONANZA LAKE CLAIMS
FOR Industrial Fillers Ltd.
BY VANGUARD CONSULTING LTD.
LOCATION MAP
NANAIMO MINING DIVISION, B.C.
N.T.S. 92 L
DATE. SEPT. 1988
DRAWN BY. J.W.
FIGURE No. 2
SCALE 1:250,000
Km 0 5 10 Km
Vanguard Consulting Ltd.

1.4 PHYSIOGRAPHY

Tsulton property occupies a portion of the transition between the lowlands of Vancouver Island's NorthEast coast and the rugged mountain ranges to the south. Elevations on the property range from 25 meters to 400 meters a.s.l. The property is a western facing side hill with an average slope of 12^{o} over 1800 meters, being steeper along the Nimpkish Lake shore. The drainage has a trellis pattern; creeks can be expected to flow during run-off periods only. Water for exploration purposes can be drawn from Nimpkish Lake.

The property lies within a humid section of the Coastal physiographic region. Precipitation is heavy, falling largely as rain during winter months. Snow accumulates at higher elevations.

2.1 REGIONAL GEOLOGY

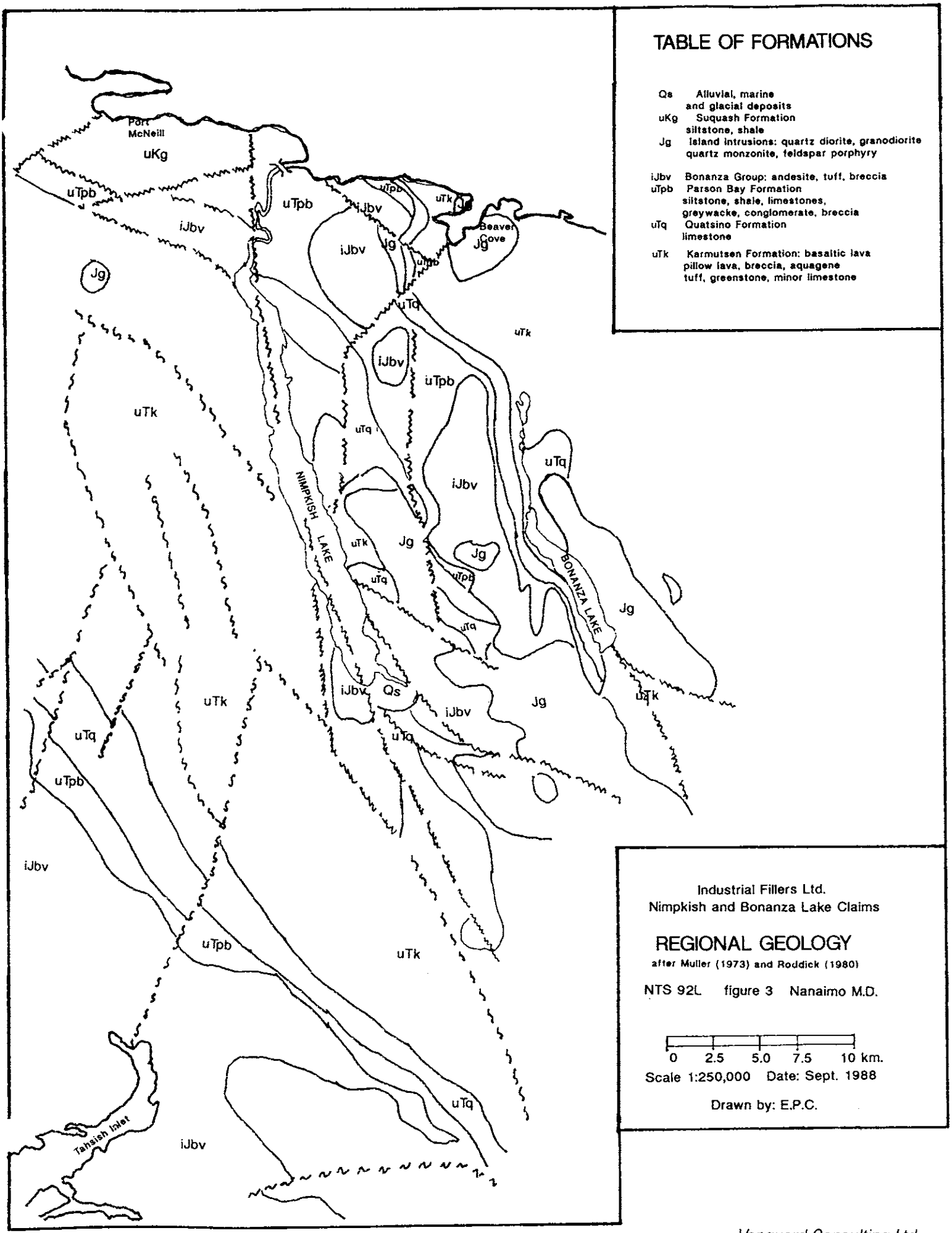
The area is primarily composed of intermediate volcanic sequences of the Karmutsen Formation conformably overlain by Quatsino Formation limestone, both being members of the Upper Triassic Vancouver Group. In some areas Triassic Parson Bay mixed sedimentary rock and, in turn, Lower Jurassic Bonanza Group intermediate to felsic volcanic sequences overlie the Quatsino Formation. All of this rock generally trends to the northwest, displaying a series of open folds.

All of the above units have been intruded by members of the intermediate to felsic Island Intrusions of Upper Jurassic age. These intrusions are felt responsible for both skarn and hydrothermal metal deposits at numerous locations on Vancouver Island.

Major faults tend to lie sub-parallel to the fold structures, although cross-faulting has been mapped.

2.2 PROPERTY GEOLOGY

As mapped by Brown, Tsulton property consists of an outlier (erosional/fault) of Quatsino limestone in conformable contact with undifferentiated Karmutsen basalt and andesite, all of which has been intruded by a northwesterly trending body of coarse grained biotite quartz monzonite. Thin sills and dykes of fine grained diabase cut the limestone but were not seen to cut the monzonite. Thin skarns form along the volcanic/limestone contact.



Vanguard Consulting Ltd.

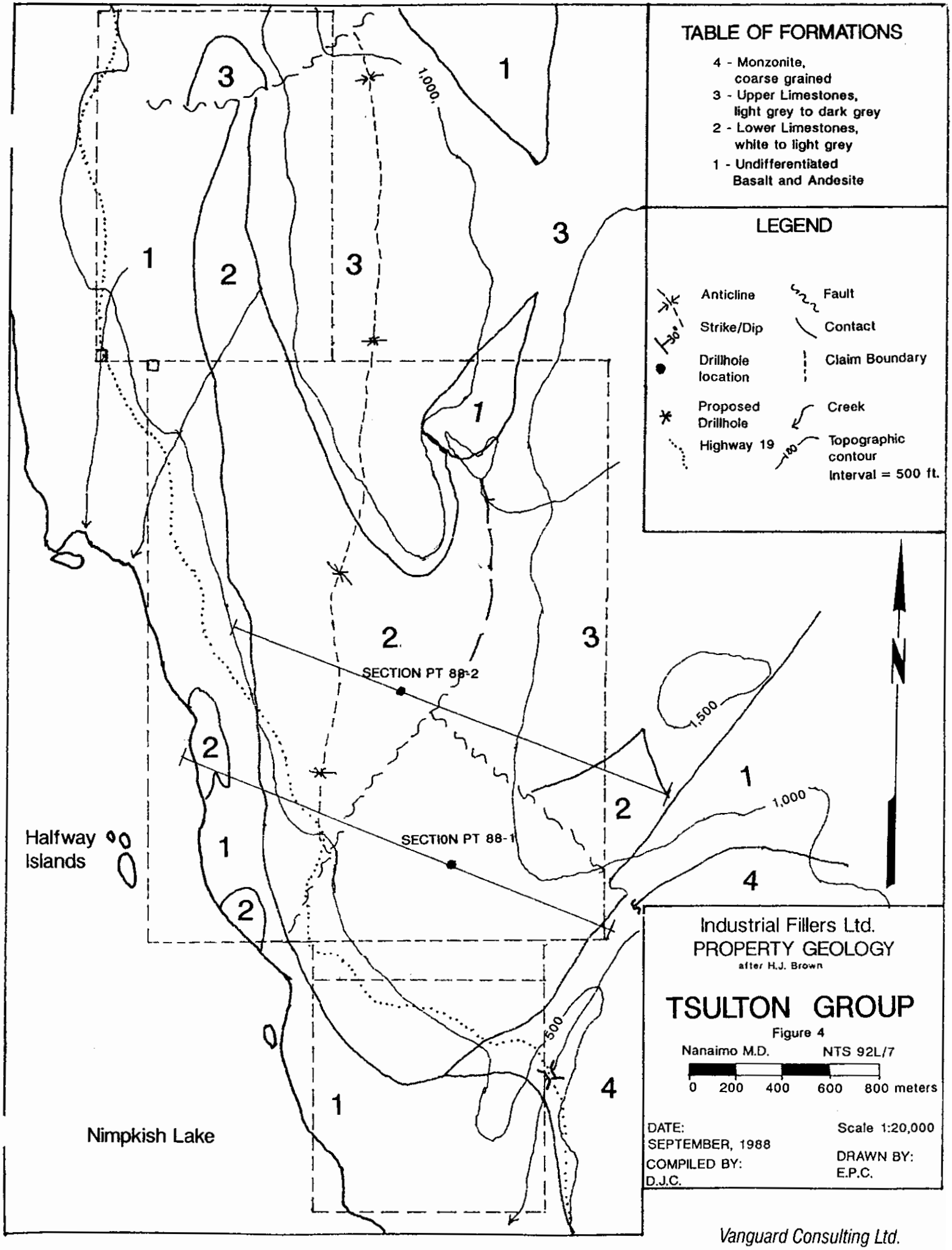


TABLE OF FORMATIONS
4 - Monzonite, coarse grained
3 - Upper Limestones, light grey to dark grey
2 - Lower Limestones, white to light grey
1 - Undifferentiated Basalt and Andesite
LEGEND
Anticline
Fault
Strike/Dip
Contact
Drillhole location
Claim Boundary
Proposed Drillhole
Creek
Highway 19
Topographic contour Interval = 500 ft.
SECTION PT 88-2
SECTION PT 88-1
Halfway Islands
Nimpkish Lake
1,000
1,500
500
N
Industrial Fillers Ltd.
PROPERTY GEOLOGY
after H.J. Brown
TSULTON GROUP
Figure 4
Nanaimo M.D.
NTS 92L/7
0 200 400 600 800 meters
DATE:
SEPTEMBER, 1988
COMPILED BY:
D.J.C.
Scale 1:20,000
DRAWN BY:
E.P.C.
Vanguard Consulting Ltd.

The limestone is divided into Upper and Lower members. The Upper member is medium to dark grey in colour and occasionally contains silica. Interbeds of white weathering, off white to light grey limestone are also present. The Lower member is generally fine grained, except were recrystallized, and has thin beds of dark grey and cherty material. Pyritic lens both conform to and cross bedding.

Bedding in the limestone generally trends northerly. A synclinal axis runs through the centre of Tsulton 1 in Lower Limestone, passing east of Tsulton 3 along the top of a small ridge in Upper Limestone. Dips flatten quickly away from the axis in either direction, indicating a fairly broad, shallow structure.

The June examination was conducted in order to identify the probable source of the contaminates found in the Lower member, and to decide how the apparent trend of the limestone could be tested while providing continuous sections of the Lower member.

The pyritic lens are areas which have been replaced by vitreous to cloudy silica, with blebs and poorly formed crystals of pyrite filling random fracture planes. They are defined by remnant bedding planes and by fractures trending northeasterly, sub-parallel to the limestone/monzonite contact. The lens are most prominent in the southern part of the property, though one was seen in Tsulton 3 near the limestone/volcanic contact. Pyritic lens increase with proximity to the volcanic/limestone contact and proximity to the monzonite body. They appear to be the result of hydrothermal fluids which moved along planes of weaknesses during intrusion of the monzonite body.

3.1 DRILL PROGRAM

Two 150 metre BQ diamond core holes, PT-88-1 and 88-2, have been completed in the centre of the property (see figure 3). The holes were spotted at road accessible sites located approximately 750 metres apart at the same elevation. Diamond drill hole PT-88-1 was spotted 700 m @ Az. = 295° from the monzonite contact. PT-88-2 was spotted 750 m @ Az. = 345° laterally and 5 m vertically lower from PT-88-1.

PT-88-1 was collared in then cut 134.5 metres of generally light grey to white limestone, with one 8.5 m section of grey limestone centered at 41 meters. The section from 17 m to 27.5 m contains what appear to be three andesitic dykes, which have been silicified and pyritized; the dykes represent 75% of this section.

The section from 134.5 m to 137.5 m containes 1 m of amygdaloidal andesite followed by 2 m of white limestone. The section from 137.5 m to 152.5 m (bottom of hole) contained greenish grey andesite which has been altered to chlorite and epidote in places (see section 88-1).

PT-88-2 was collared in, then cut, 65 meters of generally light grey to grey limestone. From 65 m to 88 m the hole cut alternating lens of generally light grey to white limestone and intermediate volcanics; several of the contacts have been altered by hydrothermal fluids. From 88 m to 152 m (bottom of hole) the hole cut greenish grey andesite which has been altered to chlorite and epidote in places. The limestone/volcanic contact has been altered to silica and pyrite for a length of 5 metres (see section 88-2).

Both holes indicate that the limestone/volcanic contact is flat or dipping very gently along the section Az. = 295°. That is to say the limestone/volcanic contact appears to generally strike 115°-295°. The calculated dip based on this assumption is approximately -5° to the south or southeast. Because of the distance between the two holes and the shallow angle of dip the accuracy of this result is fairly low. Until fill-in data is available, the assumption should be simply that the contact has a shallow dip in a southerly direction.

The north-south trending synclinal axis mapped in the limestone does not appear to be representative of the contact orientation. This is probably a result of either

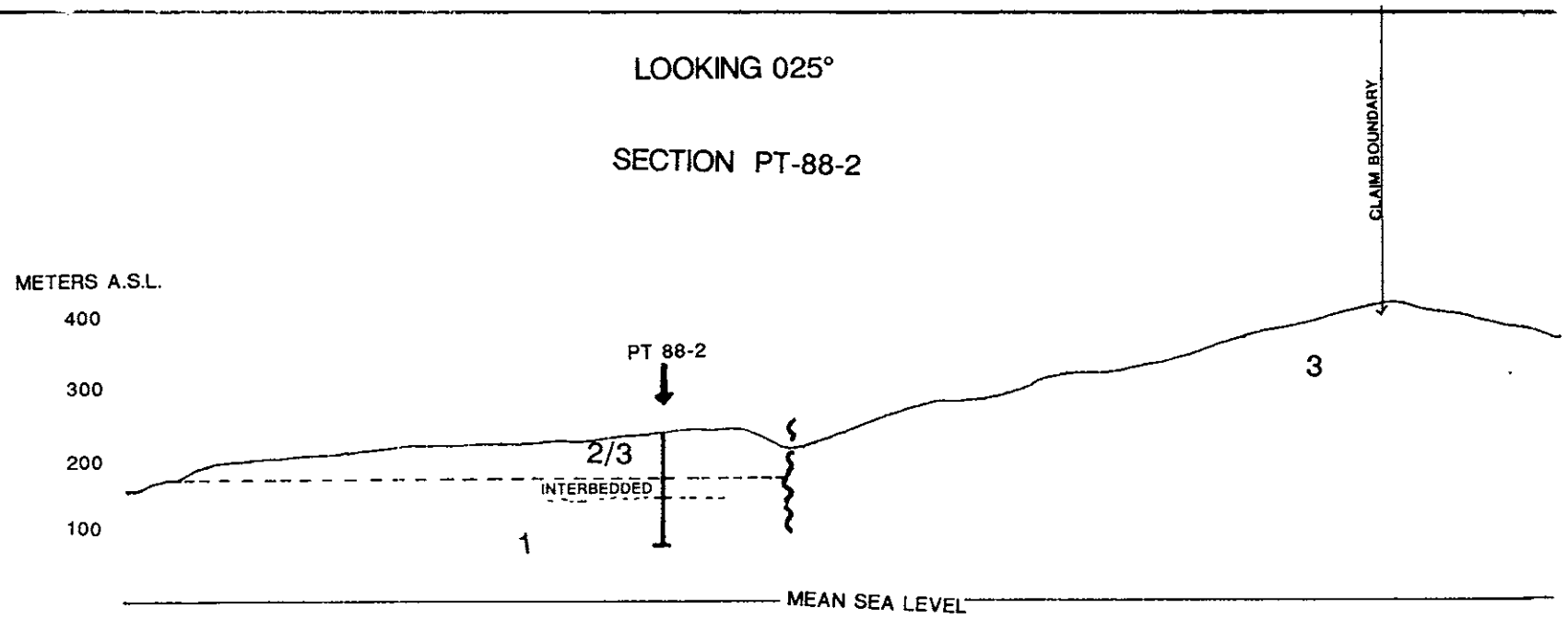
a) location of one or both of the holes over a local rise in the paleotopography,

b) discrepancy resulting from the movement of intervening faults,

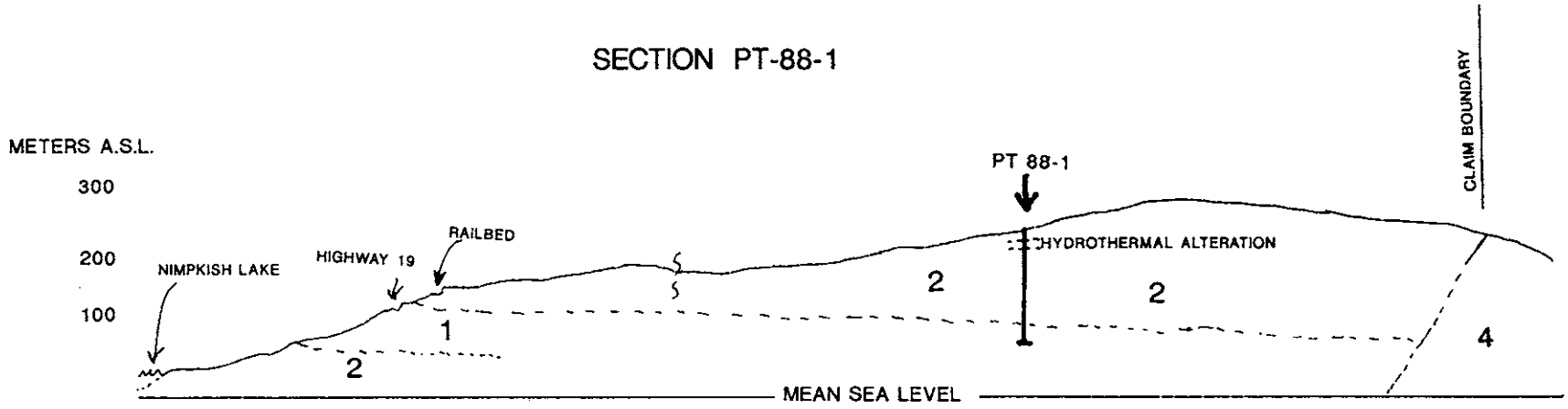
c) the synclinal axis represents slumpage of the evaporite layers due to shrinkage from dehydration during formation.

LOOKING 025°

SECTION PT-88-2



SECTION PT-88-1



September, 1988
Compiled by:D.J.C.
Drawn by:E.P.C.

SCALE IN METRES

100 200 300 400 500

1: 10,000 AS DRAWN

Industrial Fillers Ltd.
TSULTON GROUP
DRILL SECTIONS

Figure 5

Vanguard Consulting Ltd.

4.1 CONCLUSIONS

Pyritic lens are the result of hydrothermal and vapour replacement along planes of weakness, probably related to the monzonite intrusion. Partial recrystalization of the limestone may have taken place at the same time. This implies a trade-off of between increased thermal recrystalization of the limestone and increased hydrothermal impurities proximal to the monzonite.

Diamond drilling encountered the Karmutsen contact higher than would have been expected from an interpretation of surface mapping. This may be because of a local rise(s) in the paleotopography, or because folding evident in the limestone is representative of depositional processes not related to the limestone/volcanic contact. The apparent dip, from drill intersections, of the contact at a shallow angle to the south is influenced by intervening faults, and requires further testing to ensure its reliability.

Visual examination of the PT-88-1 core indicates sufficient light colored stone in this section to justify further work. The major impurity is a section of hydrothermal alteration in andesite dykes. These alterted dykes are of sufficient size to themselves warrant further work if they contain precious or other metal content at economic grade.

Visual examination of PT-88-2 core indicates that the quantity of dark stone interbeded with white may preclude efficient mining, unless analytical results from the core indicate particularly efficient milling is possible.

4.2 RECOMMENDATIONS

Analytical sampling of the property, especially proximal to the monzonite, should include analysis of the hydrothermal alteration for precious and other metal content. Similar alteration of these units elsewhere contains economic gold mineralization.

The general condition of the limestone/volcanic contact could be tested by the drilling of one hole on section with 88-1 and 88-2, from an existing road location approximately 850 m north of 88-2. This hole would be collared near the Upper/Lower contact, there by testing the a complete section of the later. A series of holes should also be drilled around PT-88-1 in order to test continuity of section over shorter distances. This information could then be used to enhance the present structural interpretation prior to broad pattern drilling.

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Cristian Soux, B.Sc.
03/09/88

.....

David Coffin
03/09/88

5.1 REFERENCES

Brown, H.J.	June 1984	Geology of the Port McNeill(sic) Quarry Area MAP ONLY; Private report.
Gunning, H.C. & Hoadley, J.W.	1929/31 1952	Geology of Nimpkish Map Sheet @ 1" = 1 mile; GSC map 1029A
Muller, J.E. & Roddick, J.A.	1973 1980	Geology of Alert Bay - Cape Scott @ 1:250,000; GSC map 1552A

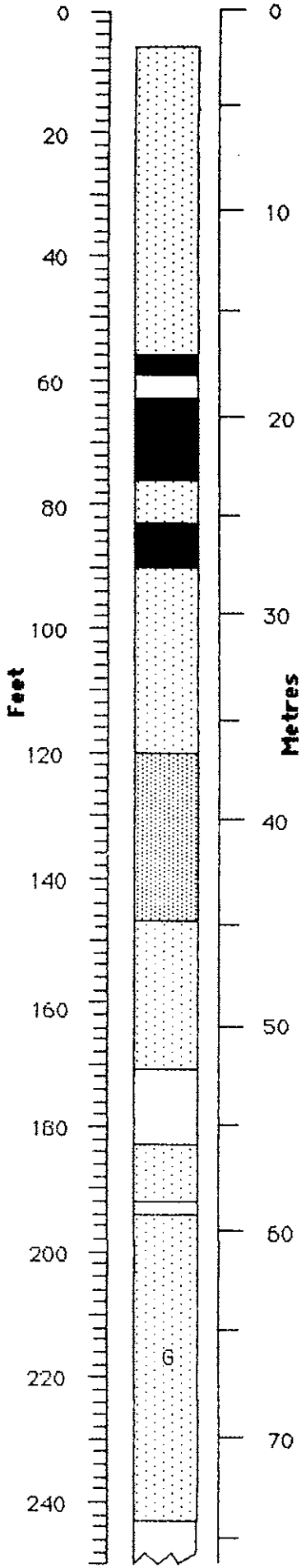
COST BREAKDOWN

Diamond Drilling (all direct costs inc.)	
1000 feet @ $33.00	$33,000.00
C. Soux 3 days @ $250.00	750.00
D. Coffin 2.5 days @ $325.00	812.50
E Coffin 1.5 days @ $325.00	487.50
Vehicle rental 3 days $60.00	180.00
Meals and accommodations 3 days @ $75.00	225.00
Drafting, report preparation	545.00
TOTAL COSTS	$36,000.00

APPENDIX B

DRILL LOGS

CORE LOG
Hole Nº PT-88-1
Collar @ 240m A.S.L.



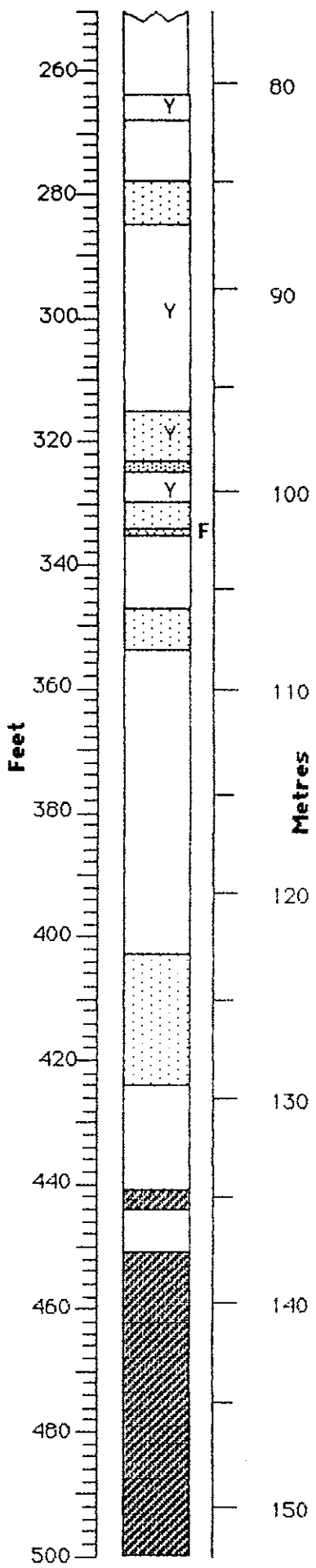
LEGEND

LIMESTONE

- White
- Light Grey
- Grey
- G Grey streaks
- Y Yellow to tan streaks

VOLCANICS

- Fine to medium grained andesitic to basaltic volcanics and dykes
- Intense Hydrothermal alteration
- F FAULT



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CORE LOG

Interval to:	Length (ft)	Rock Type	Unit	Description	Sample №
6	6	Casing		Casing.	
56	50	Limestone		Light grey. Even colouration.	PT-1-45
59	3	Andesite?	Dyke	Pinkish grey to grey silicified andesitic rock. Contains abundant pyrite.	PT-1-57
63	4	Limestone		White.	
76	13	Andesite	Dyke	Grey silicified andesite veined by calcite. Pyrite in veinlets and clusters.	
83	7	Limestone		White with grey patches.	PT-1-83
90	7	Andesite	Dyke	Silicified andesite. Contains pyrite in veinlets and disseminated.	
120	30	Limestone		White to light grey.	
147	27	Limestone		Grey. Small sections of white limestone intercalated.	
171	24	Limestone		Light grey. Grey and white streaked.	
183	12	Limestone		White.	PT-1-175
192	9	Limestone		White to light grey.	
194	2	Limestone		White.	
243	49	Limestone		White to light grey intercalated unevenly. Grey streaks, locally tan.	
264	21	Limestone		Pure white.	
268	4	Limestone		White with yellowish tint. Narrow fractures filled with limonite.	
278	10	Limestone		White to greyish white.	
285	7	Limestone		Light grey.	
315	30	Limestone		Greyish white containing some limonitic fractures.	
318	3	Limestone		Light grey containing some limonitic fractures.	
323	5	Limestone		Greyish to yellowish. Contains fractures filled with (limonite?) or ankerite.	

CORE CONDITION

Interval to:	Length (ft)	% Recovery	Description
323	323	100	

Client: Pluess Stauffer Industries Inc.
Project: TSULTON
Hole: № PT-88-1 Interval: 0' to 323'
Azimuth/Inclination: Vertical
Logged by: C.L. Soux Date: Aug.9'88

Vanguard Consulting Ltd.

CORE LOG

Interval to:	Length (ft)	Rock Type	Unit	Description	Sample Nº
325	2	Limestone		Brecciated grey clasts cemented by calcite.	
330	5	Limestone		White with numerous ankeritic? veinlets.	
334	4	Limestone		White and grey patches. Partly brecciated.	
335	1	Gangue	Fault	Light yellow clayey material.	
347	12	Limestone		White to greyish white.	
354	7	Limestone		Light grey.	
413	59	Limestone		White to greyish white.	
424	11	Limestone		Light grey.	
441	17	Limestone		Greyish white.	
444	3	Andesite?	Dyke	Dark greenish grey amygdaloidal andesitic volcanic rock. Contains some pyrite in veinlets and disseminated.	
451	7	Limestone		Greyish white.	
500	49	Andesite		Dark greenish grey andesitic rock. Locally strongly chloritized and epidotized. Pervasive chloritization? Contains disseminated pyrite.	PT-1-454

CORE CONDITION

Interval to:	Length (ft)	% Recovery	Description
500	177	100	

Client: Pluess Stauffer Industries Inc.
Project: TSULTON
Hole: Nº PT-88-1 Interval: 323' to 500'
Azimuth/Inclination: Vertical
Logged by: C.L. Soux Date: Aug.9'88

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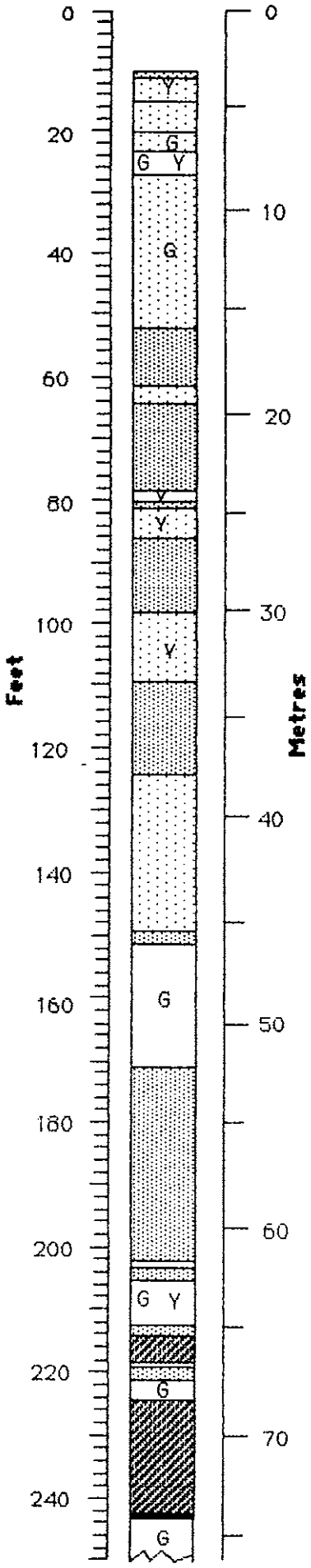
CORE LOG
Hole Nº PT-88-2
Collar @ 235m A.S.L.



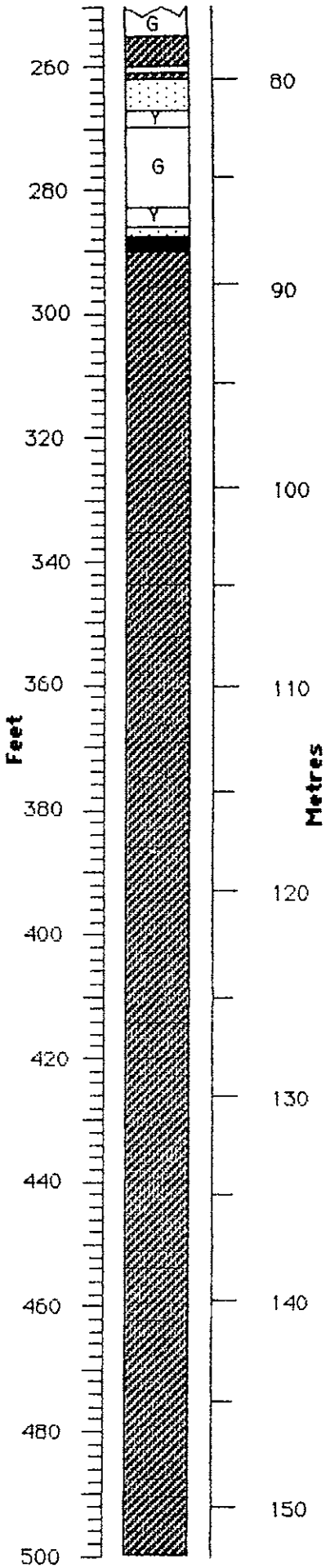
LEGEND

LIMESTONE

- White
- Light Grey
- Grey
- G — Grey streaks
- Y — Yellow to tan streaks

VOLCANICS

- Fine to medium grained andesitic to basaltic volcanics and dykes
- Intense Hydrothermal alteration



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CORE LOG

Interval to:	Length (ft)	Rock Type	Unit	Description	Sample №
10	10	Casing.		Casing.	
11	1	Limestone		Grey.	
15	4	Limestone		Greyish white. Contains abundant limonitic fractures.	
20	5	Limestone		Greyish white with less fracturing than above.	
23	3	Limestone		Greyish white with grey streaks predominant over tan streaks.	
27	4	Limestone		White. Contains some tan and grey streaks.	
52	25	Limestone		Greyish white. Contains grey streaks.	
61	9	Limestone		Dark grey. Contains streaks of calcite. Pyrite present in narrow fissures and disseminated.	
64	3	Limestone		Greyish white with grey streaks.	
78	14	Limestone		Dark grey. Contains some calcite veinlets.	
80	2	Limestone		Tan-white. Very fractured with limonitic staining.	
81	1	Limestone		Dark grey. Contains small amounts of disseminated pyrite.	
86	5	Limestone		Greyish white-tan. Contains limonite after pyrite in stringers and disseminated.	
98	12	Limestone		Grey. Locally contains limonitized pyrite (disseminated).	
109	11	Limestone		Light grey to tan. Contains limonitic streaks. Streaks coarse to fine.	
124	15	Limestone		Grey. Locally contains abundant limonite.	
149	25	Limestone		Light grey to tan white. Locally contains limonite in stringers and disseminated.	
151	2	Limestone		Grey.	

CORE CONDITION

Interval to:	Length (ft)	% Recovery	Description
151	151	100	Good condition.

Client: Pluess Stauffer Industries Inc.
Project: TSULTON
Hole: № PT-88-2 Interval: 0' to 151'
Azimuth/Inclination: Vertical
Logged by: C.L. Soux Date: Aug.8'88

Vanguard Consulting Ltd.

CORE LOG

Interval to:	Length (ft)	Rock Type	Unit	Description	Sample №
171	20	Limestone		Greyish to tan, white. Locally, grey streaks contain disseminated pyrite; yellow streaks, limonite.	
176	5	Limestone		Grey. Contains abundant calcite veinlets.	
178	2	Limestone		Grey. Cemented by crystalline calcite.	
202	24	Limestone		Grey, containing abundant calcite veinlets.	
203	1	Limestone		White (consists primarily of calcite).	
205	2	Limestone		Grey, containing abundant calcite veinlets.	
212	7	Limestone		White. Contains grey and yellowish streaks.	
214	2	Limestone		Grey with abundant calcite veinlets.	
218	4	Andesitic Dyke?		Greenish grey fine grained andesitic dyke containing disseminated pyrite. Near contact with limestone, more abundant pyrite present.	
219	1	Limestone		White.	
221	2	Limestone		Grey.	
224	3	Limestone		White with grey streaks.	
242	18	Andesite		Greenish grey. Shows chloritic alteration. Contains veinlets of calcite. Pyrite in veinlets and disseminated. Contact with limestone contains more pyrite.	
243	1	Andesite		Creamy grey. Colour change due to proximity of contact with limestone. Contains disseminated pyrite.	
255	12	Limestone		White to grey intercalated. Contains some pyrite in fissures.	
260	5	Andesite		Green andesitic volcanics. Contains abundant calcite veinlets.	

CORE CONDITION

Interval to:	Length (ft)	% Recovery	Description
260	109	100	Good condition.

Client: Pluess Stauffer Industries Inc.
Project: TSULTON
Hole: № PT-88-2 Interval: 151' to 260'
Azimuth/Inclination: Vertical
Logged by: C.L. Soux Date: Aug.8'88

Vanguard Consulting Ltd.

CORE LOG

Interval to:	Length (ft)	Rock Type	Unit	Description	Sample №
261	1	Limestone		White. Composed of crystalline calcite.	
262	1	Andesite		Green with abundant calcite veinlets.	
267	5	Limestone		White to grey intercalated.	
270	3	Limestone		Yellowish white. Contains limonitic streaks.	
283	13	Limestone		White to light grey. Contains grey streaks.	
286	3	Limestone		White to yellowish white containing limonitic streaks.	
288	2	Limestone		Light grey containing pyrite in veinlets and disseminated. Pyrite becomes more abundant as it nears the contact with andesite.	
290	2	Andesite		Creamy grey containing abundant pyrite disseminated in veinlets and pods.	PT-2-288
292	2	Andesite		Greenish grey containing some disseminated pyrite.	
303	11	Andesite		Dark grey with large patches of apple green alteration (epidote). Contains disseminated pyrite.	
500	197	Andesite		Grey to dark greenish grey. Pervasive chloritization. Locally epidotized and veined by calcite. Some pyrite dissemination.	

CORE CONDITION

Interval to:	Length (ft)	% Recovery	Description
500	240	100	Good condition.

Client: Pluess Stauffer Industries Inc.
Project: TSULTON
Hole: № PT-88-2 Interval: 260' to 500'
Azimuth/Inclination: Vertical
Logged by: C.L. Soux Date: Aug.8'88

Vanguard Consulting Ltd.

APPENDIX C_1

CERTIFICATE

I Cristian Soux, of Ladner B.C., certify that:

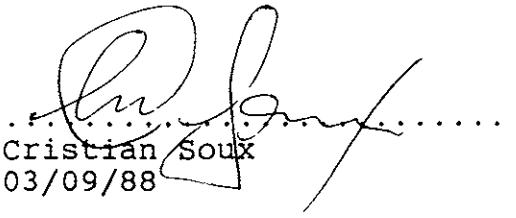
1) I am an independent consulting geologist, contracted for the term of this project to Vanguard Consulting Ltd. of 706-675 West Hastings St., Vancouver B.C.

2) I graduated from the University of British Columbia with a Bachelor of Science degree in 1972.

3) Since graduation I have been involved in mineral exploration programs in Canada, Bolivia, Malaysia, Indonesia, Thailand Ethiopia, including consulting in applied mineralogy to the United Nations.

4) This report is based upon field work conducted by myself from August 2 to 9, 1988.

5) I hold no interest in the property or in its owner.



Cristian Soux
03/09/88

APPENDIX C_2

CERTIFICATE

I David Coffin of Vancouver, B.C. certify:

1) I am a consulting explorationist with the firm of Vanguard Consulting Ltd. at 706-675 W.Hastings St., Vancouver, B.C.

2) I attended the Haileybury School of Mines, Ontario, in the department of Mining Technology, from 1975 to 1977.

3) Since 1974 I have worked in a variety of jobs in the Canadian mineral exploration field including regional and detailed prospecting, detailed geological mapping, core logging, property management and program development.

4) This report is based upon field work conducted by myself during the period June 15 to July 29, 1988.

5) I hold no interest in the property or its owner.

David Coffin