

85-324
#13668



01/86

RECONNAISSANCE GEOLOGICAL MAPPING
AND
ROCK SAMPLING
FITZWATER GROUP
VICTORIA, ALBERNI MINING DIVISIONS
NTS 92F/2 49°03'N LAT. 124°38'W LONG.
FOR
SCHREIBER RESOURCES LTD.
MAY 21, 1985
T.G. HAWKINS, P.GEOL. T. NEALE, B.SC.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,668

SUMMARY

Exploration on the Fitzwater Group of claims, in the Alberni and Victoria Mining Divisions, consisting of preliminary geological mapping and rock sampling for lithochemical and whole rock analysis, was carried out by MPH Consulting Limited in June and July, 1984.

Geological mapping has resulted in a re-interpretation of previously mapped regional geology. It now appears that large areas of the claim block are underlain by Myra Formation rocks of the Sicker Group and not by Karmutsen Formation basic volcanics.

A sample from massive pyrite float, the source of which was not located, returned values of 130 ppb Au and 1.0 ppm Ag, while a sericitized and epidotized pyritic andesite outcrop returned a value of 210 ppb Au. Computer processing of whole rock analyses indicates that the volcanics are actually of mainly basaltic composition and that two samples, 850 m apart, may outline a horizon favourable for hosting volcanogenic base metal and/or gold mineralization.

The Thistle Mine property of Nexus Resource Corporation is located 3.5 km north of the Fitzwater Group. Production in the 1930's totalled 6920 tons grading 0.40 oz/ton Au, 0.31 oz/ton Ag and 4.92% Cu. Westmin Resources Ltd. is committed to spend \$1.4 million on this volcanogenic massive sulphide property to obtain a 40% interest. Published surface assay results range up to 0.95 oz/ton Au and 3.84% Cu over 3.2 m at the mine, and a best result of 0.10% Cu, 0.490 oz/ton Au, and 0.05 oz/ton Ag from the new Panther Road showing 1.4 km SE of the Thistle Mine (i.e. 2 km north of the Fitzwater Group).



This trend has been traced onto the Fitzwater Group by both Westmin and MPH. Five other past producing properties occur in the Port Alberni area, along with many other sub-economic precious and base metal occurrences. The potential for locating a volcanogenic massive sulphide deposit and/or a precious/base metal quartz vein deposit on the property is considered very good.

A 14-day Phase I program of geological mapping and rock sampling is recommended at an estimated cost of \$31,000. A 22-day Phase II program consisting of rock sampling, detailed geological mapping, soil sampling, trenching and VLF-EM and magnetometer surveys over a cut grid is recommended at an estimated cost of \$70,000.



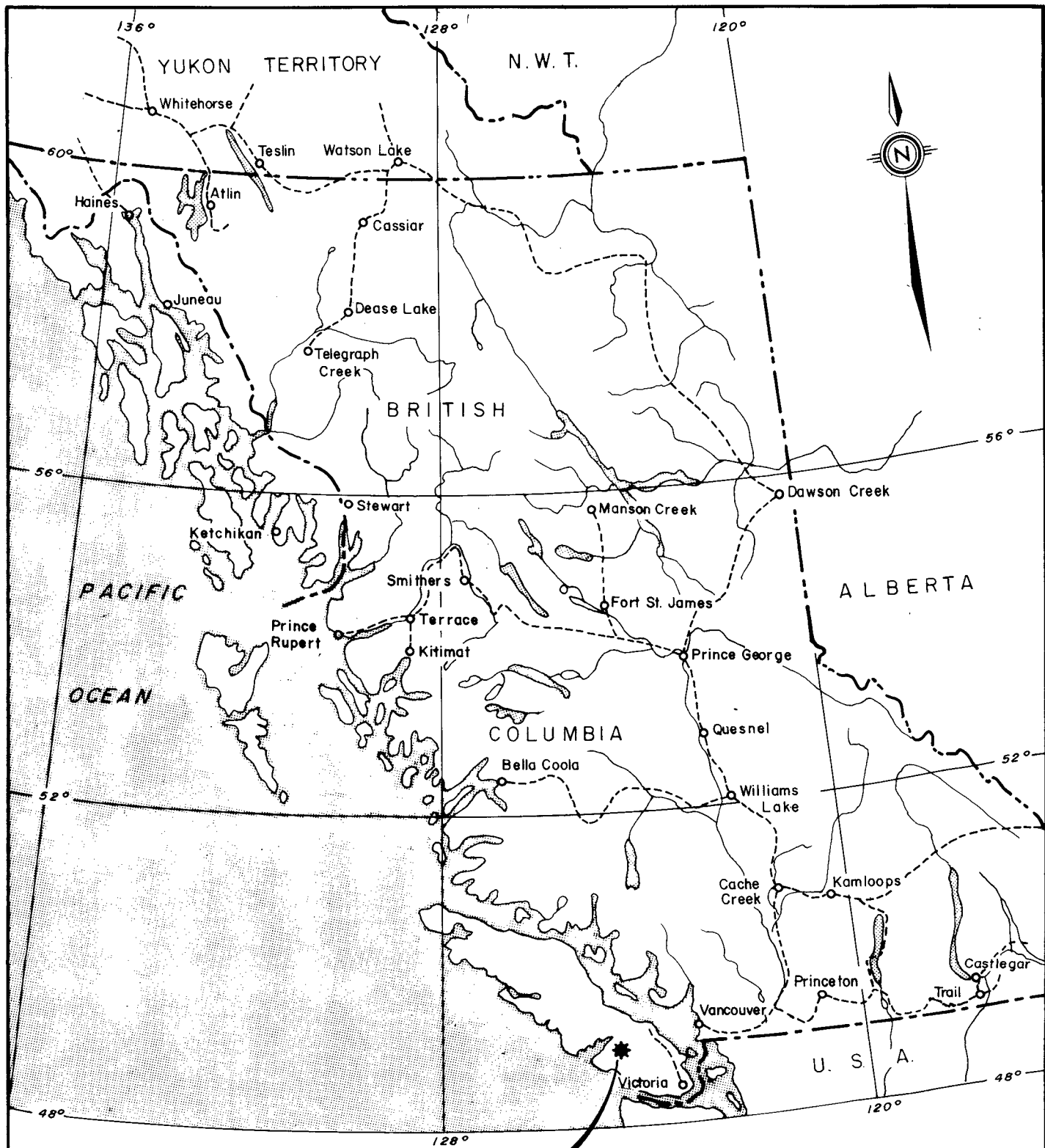
TABLE OF CONTENTS

	page
SUMMARY	i
1.0 INTRODUCTION	2
2.0 PROPERTY LOCATION, ACCESS, TITLE	3
3.0 PREVIOUS WORK	6
4.0 REGIONAL GEOLOGY	7
4.1 Sicker Group	7
4.2 Vancouver Group	11
4.3 Nanaimo Group	12
4.4 Intrusive Rocks	13
4.5 Structure	13
4.6 Economic Setting	15
4.7 Mineral Occurrences	18
5.0 LOCAL GEOLOGY AND WORK DONE	41
6.0 RECOMMENDED WORK PROGRAM	44
6.1 Plan	44
6.2 Budget	46
6.3 Schedule	48
7.0 CONCLUSIONS	50
8.0 RECOMMENDATIONS	52
Certificate - T. Neale, B.Sc.	54
Bibliography	55
Appendix I - List of Personnel and Expenditures	
II - Rock Sample Descriptions and Lithogeochemistry Results	
III - Computer Interpretation of Whole Rock Analyses	
IV - Certificates of Analysis	
V - Abbreviations Used in Mineral Occurrences Section	



LIST OF ILLUSTRATIONS

		page
Figure 1	Location Map	1
2	Claim Map	5
3	Regional Geology Map	8
4	Mineral Occurrences Location Map	19
5	Property Plan, Geology, and Rock Sampling - Fitzwater Group	in pocket
Table I	Phases I & II Project Schedules	49



FITZWATER GROUP

SCHREIBER RESOURCES LIMITED

GENERAL LOCATION MAP
FITZWATER GROUP

VICTORIA, ALBERNI MINING DIVISIONS

Project No.	V 188	By:	T. N.
Scale:		Drawn:	J. S.
Drawing No.	I	Date:	MAY, 1985.



MPH Consulting Limited



Scale: 1" = 125 miles



1.0 INTRODUCTION

This assessment report represents the compilation of geological fieldwork carried out by MPH Consulting Limited on the Fitzwater Group of claims, on June 18, 19 and July 4, 1984. Work included reconnaissance geological mapping and rock sampling for litho-geochemical and whole rock analysis.

Included in the report are a summary of all known geological and mining exploration activity in the area, a description of regional and property geology, and a discussion of the economic setting of the property. A recommended work program designed to explore the economic massive sulphide and/or quartz vein potential of the claims is provided.



2.0 LOCATION, ACCESS, TITLE

The Fitzwater Group of claims is located 22 km southeast of Port Alberni on the northern slopes of Mt. Spencer and along the Rift Creek valley in the Victoria and Alberni Mining Divisions of British Columbia. The Group is centred at roughly 49°03'N latitude, 124°38'W longitude on NTS mapsheet 92F/2. Additional claims held by Ladysmith Minerals Ltd. in the area and subject to the possible Schreiber option, are the Rodeo and Aft claims. The Rodeo claim occupies the valley between Mount Olsen and Logan Peak, centred at 49°00.7'N latitude, 124°39'W longitude. The Aft claim is located in the valley between Mount Olsen and Mount Spencer, centred at 49°02.3'N latitude, 124°40'W longitude. Both claims are located in the Alberni Mining Division.

Access to the Fitzwater Group claim block is provided by the all-weather gravel Bamfield Road from Port Alberni to Franklin River, then the Thistle Mine Road and Museum Road up Museum Creek. The Museum Road runs through the northern portion of the Fitz and Water claims. Numerous logging roads provide good access to the Water and Lat claims; only one road goes onto the Fitz claim. At the time of writing, most roads are in good condition and are driveable by two-wheel drive vehicles.

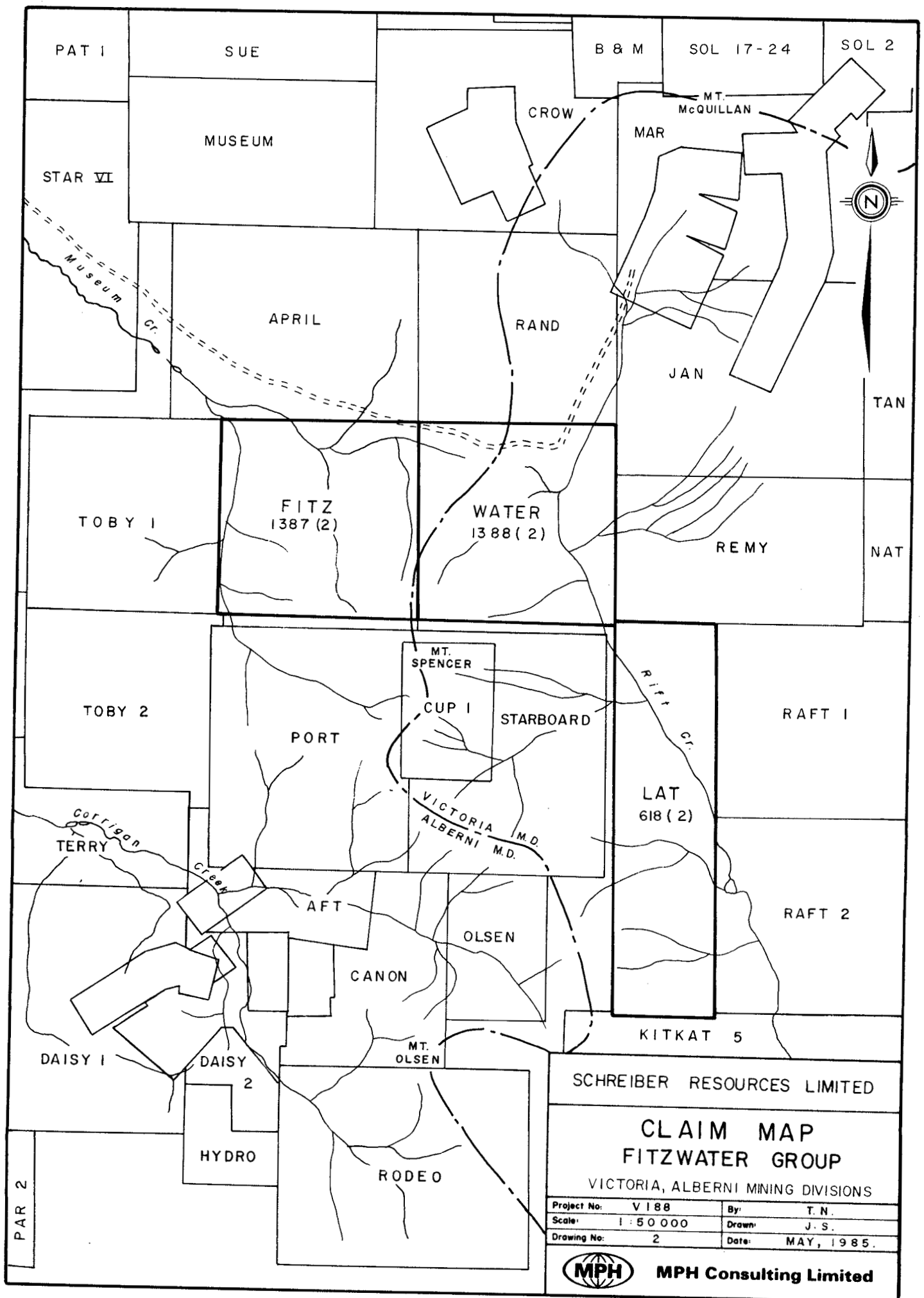
Access to the Rodeo and Aft claims is via the Bamfield Road and then the Corrigan Road up Corrigan Creek. The Corrigan Road runs through both claims. No other roads on either of the claims are known to exist.



Claim information is summarized below:

<u>Claim</u>	<u>Record No.</u>	<u>Units</u>	<u>Anniversary Date</u>
Fitz	1387(2)	16	Feb. 25, 1985
Water	1388(2)	16	Feb. 25, 1985
Lat	618(2)	<u>16</u>	Feb. 25, 1985
		48	
Rodeo	1385(2)	20	Feb. 25, 1984
Aft	1389(2)	<u>8</u>	Feb. 25, 1984
		28	

The Fitz, Water and Lat claims were grouped as the Fitzwater Group by Notice to Group #1116, dated February 24, 1984. The Fitzwater Group claims and the Rodeo and Aft claims are all owned 100% by Ladysmith Minerals Ltd.



PAT 1

SUE

B & M

SOL 17-24

SOL 2

MUSEUM

CROW

MT. McQUILLAN

MAR

STAR VI

APRIL

RAND

JAN

TAN

TOBY 1

FITZ 1387 (2)

WATER 1388 (2)

REMY

NAT

TOBY 2

PORT

MT. SPENCER

CUP 1

STARBOARD

RAFT 1

TERRY

Corrigon Creek

Creek

VICTORIA I.M.D.
ALBERNI M.D.

RIFT Creek

LAT 618 (2)

RAFT 2

AFT

OLSEN

CANON

MT. OLSEN

KITKAT 5

DAISY 1

DAISY 2

HYDRO

RODEO

SCHREIBER RESOURCES LIMITED

CLAIM MAP FITZWATER GROUP

VICTORIA, ALBERNI MINING DIVISIONS

Project No:	V 188	By:	T. N.
Scale:	1 : 50 000	Drawn:	J. S.
Drawing No:	2	Date:	MAY, 1985.



MPH Consulting Limited

PAR 2



3.0 PREVIOUS WORK

Government geological work in the area includes mapping by C.H. Clapp (1912 and 1914), J.E. Muller and D.J.T. Carson (1969), and J.E. Muller (1977 and 1980).

A regional aeromagnetic survey flown by Hunting Survey Corp. Ltd. in 1962 included the Fitzwater Group area.

During the years 1963-1966, Gunnex Ltd. carried out a regional mapping program with limited prospecting and silt sampling. They compiled a list of all known mineral occurrences in the area and visited many of them. No other work on the Fitzwater Group ground is known of. An extensive exploration program was carried out on the Mary Group (Cup 1-6 claims), less than 0.5 km south of the Water claim by Gunnex from 1964-66, and by others from 1967 to 1981 (see #12 in the Mineral Occurrences section).

Arland's Showing, located on the Rodeo claim, was explored by Noranda Exploration Co. Ltd. in 1964-65, who carried out prospecting and silt sampling. An old adit also exists at the showing (see #15 in the Mineral Occurrences section).

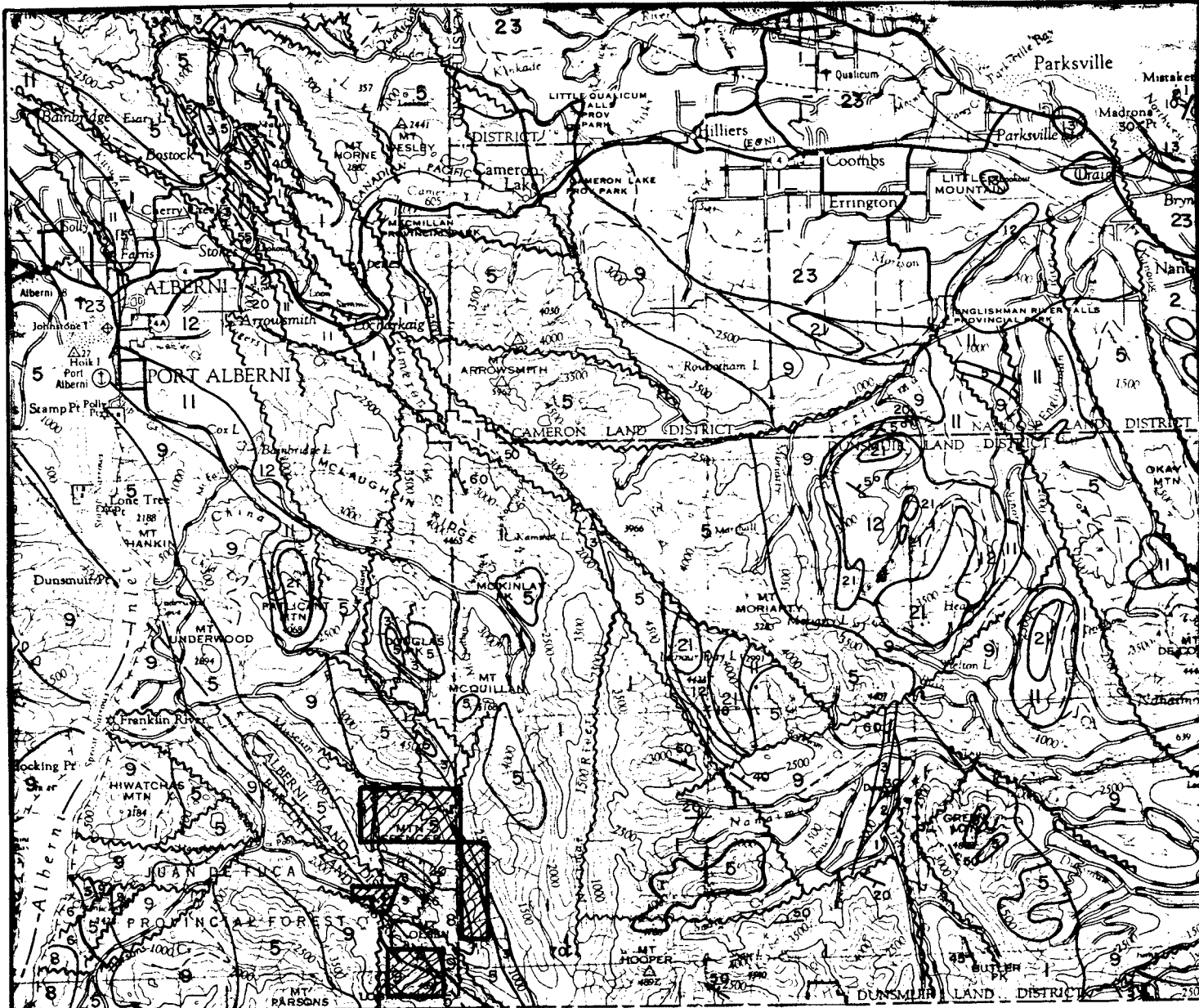
4.0 REGIONAL GEOLOGY

The predominant rock units in the Port Alberni-Cameron River area are the Upper Paleozoic Sicker Group rocks and the Lower Mesozoic Vancouver Group rocks. Both are eugeosynclinal sequences of volcanic and sedimentary rocks. Lesser amounts of the Upper Cretaceous Nanaimo Group and of intrusive rocks of various ages also occur. (Figure 3)

4.1 Sicker Group

The oldest rocks in the area are those of the Sicker Group. Muller (1980) proposed the following subdivision of the Group from youngest to oldest: Buttle Lake Formation, Sediment-Sill Unit, Myra Formation, and Nitinat Formation.

The Nitinat Formation (Unit 1) consists predominantly of basic volcanic rocks, most commonly flow-breccias, including some massive flows, and rare pillow basalts or agglomerates. Locally, medium grained, generally massive basaltic tuff is interbedded with the flows. The flow-breccia is composed of fragments of basalt up to 30 cm in length containing uralite phenocrysts and black or white amygdules, both from 1 mm to more than 1 cm in size, in a matrix of finer grained, similar basalt(?). Thin sections show that the uralite is replacing diopside. Uralitized gabbroic rocks underlie and intrude the volcanics and are believed to represent feeder dykes, sills, and magma chambers to the volcanics. The Nitinat Formation may be distinguished from the



LEGEND

QUATERNARY

23 Glacial and alluvial deposits

TERTIARY

21 Hornblende quartz diorite, leucoquartz monzonite, porphyritic dacite, breccia.

UPPER CRETACEOUS

NANAIMO GROUP

13 EXTENSION-PROTECTION FM.: sandstone, conglomerate, shale, coal.

12 HASLAM FM.: shale, siltstone, fine sandstone.

11 COMOX FM.: sandstone, conglomerate, shale, coal.

MIDDLE TO UPPER JURASSIC

9 ISLAND INTRUSIONS: biotite - hornblende granodiorite, quartz diorite.

LOWER JURASSIC TO UPPER TRIASSIC

VANCOUVER GROUP

8 BONANZA SUBGROUP, VOLCANIC DIVISION: andesitic to latitic breccia, tuff and lava, minor greywacke, argillite and siltstone.

6 QUATSINO FM.: massive to thick bedded limestone, minor thin bedded limestone.

5 KARMUTSEN FM.: pillow-basalt and pillow breccia, massive basalt flows; minor tuff, volcanic breccia; Jasperoid tuff, breccia and conglomerate at base.

TRIASSIC OR PERMIAN

4 Gabbro, periodite, diabase.

LOWER PERMIAN TO PENNSYLVANIAN
SICKER GROUP

3 BUTTLE LAKE FM.: limestone, chert.

2 MYRA FM.: lower unit; argillite, greywacke, conglomerate, tuff, minor limestone. Upper unit; rhyodacite to rhyolite tuff, lapilli tuff, breccia lesser siliceous siltstone, argillite, quartz porphyry and mafic flows.

1 NITINAT FM.: basaltic uralite porphyry, agglomerate, pillow lava; greenschist.



SCHREIBER RESOURCES LIMITED

REGIONAL GEOLOGY MAP

FITZWATER GROUP

VICTORIA, ALBERNI MINING DIVISIONS

Project No: V 188	By: T. N.
Scale: 1 : 250,000	Drawn: J. N.
Drawing No: 3	Date: MAY, 1985.

MPH Consulting Limited

similar Karmutsen Formation by the usual lack of pillow basalts, the abundance of uraltite phenocrysts, the pervasive shear foliation, and lower greenschist or higher metamorphic grade.

The Myra Formation (Unit 2) unconformably overlies the Nitinat Formation. In the Nitinat-Cameron River area the Myra Formation is made up of a lower massive to widely banded basaltic tuff and breccia unit, a middle thinly banded pelitic albite-trachyte tuff and argillite unit, and an upper thick bedded, medium grained albite-trachyte tuff and breccia unit. In the lower unit crudely layered mottled maroon and green volcanoclastic greywacke, grit, and breccia are succeeded by beds of massive, medium grained dark tuff up to 20 m thick interlayered with thin bands of alternating light and dark fine grained tuff with local fine to coarse breccias containing fragments of Nitinat Formation volcanics. The middle unit is comprised of a sequence of thinly interbedded, light feldspathic tuff (albite trachyte or keratophyre composition) and dark marine argillite which has the appearance of a graded greywacke-argillite turbidite sequence. In the upper part of the middle unit sections of thickly bedded to massive black argillite occur. The upper unit contains fine and coarse crystal tuffs in layers up to 10 m thick with local rip-up clasts and slabs of argillite up to 1 m in length as well as synsedimentary breccias of light coloured volcanic and chert fragments in a matrix of black argillite.

The type locality of the Myra Formation is Myra Creek, at the south end of Buttle Lake, about 88 km northwest of the Fitzwater Group. Here, volcanoclastic rocks consisting dominantly of



rhyodacitic or rhyolitic tuff, lapilli tuff, breccia, and some quartz porphyry and minor mafic flows and argillite (Upper Myra Formation) are host to Westmin Resources' Myra, Lynx, Price, and H-W massive sulphide (Cu-Zn-Pb-Au-Ag-Cd) deposits.

Muller (1980) estimated the thickness of the Nitinat Formation at about 2000 m and that of the Myra Formation at 750 to 1000 m. Both the Nitinat and Myra Formations were dated as Devonian and/or older by Muller (1980).

The Sediment-Sill Unit contains thinly bedded to massive argillite, siltstone, and chert with interlayered sills of diabase. It is transitional between the Myra and Buttle Lake Formations. It is not mapped within the report map area.

The Buttle Lake Formation (Unit 3) consists of a basal green and maroon tuff and/or breccia overlain by coarse grained crinoidal and calcarenitic limestone, fine grained limestone with chert nodules, and some dolomitic limestone. Lesser amounts of argillite, siltstone, greywacke, or chert may also be present.

The Buttle Lake Formation is up to 466 m thick. The age of the formation, on the basis of fossil dating appears to be middle Pennsylvanian, but could possibly be as young as early Permian (Muller, 1980).

4.2 Vancouver Group

The Karmutsen Formation volcanic rocks (Unit 5) overlie the Buttle Lake Formation limestone paraconformably to form the base of the Vancouver Group. They are the thickest and most widespread rocks on Vancouver Island. The formation, which is well exposed south-east of Port Alberni, consists mainly of dark grey to black pillowed basalt, massive basalt and pillow breccia. Flows are commonly aphanitic and amygdaloidal. Pillowed volcanics generally occur toward the base of the section.

Conglomerate containing clasts of Sicker Group rocks and jasperoid tuff form basal sections in the Nitinat-Horne Lake area.

Karmutsen Formation rocks are generally relatively undeformed compared to Sicker Group rocks and are dated Upper Triassic and older.

Massive to thick bedded limestone of the Quatsino Formation (Unit 6) occurs south of Mount Spencer. The limestone is black to dark grey and fine grained to micro-crystalline. In the vicinity of intrusive rocks, coarse grained marble is recognized. Thin bedded limestone also occurs in the formation. Fossils indicate an age of Upper Triassic (Muller and Carson, 1969).

The Bonanza Subgroup of the Vancouver Group consists of a lower sedimentary unit and an upper volcanic unit. The sedimentary unit is not exposed in the Port Alberni area. The volcanic unit (Unit 8) is exposed south of Mount Spencer and south of Corrigan Creek

and consists of light coloured andesite to latite breccia, tuff and flows with minor greywacke, argillite and siltstone. The unit is considered to be possibly of Lower Jurassic age.

4.3 Nanaimo Group

Upper Cretaceous Nanaimo Group sedimentary rocks are scattered throughout the area. Extensive exposures occur near Port Alberni, Patlicant Mountain and south and northwest of Mount Moriarty. The formations present comprise the basal portions of the Nanaimo Group.

The Comox Formation (Unit 11) consists mainly of quartzofeldspathic, cross-bedded beach facies sandstone and lesser conglomerate. Numerous intercalations of carbonaceous and fossiliferous shale and coal are characteristic.

The Haslam Formation (Unit 12) is a near shore littoral depositional facies unit characterized by massive bedded fossiliferous sandy shale, siltstone and shaly sandstone.

Interbedded coarse clastic conglomerate, pebbly sandstone and arkosic sandstone of the Extension-Protection Formation (Unit 13) are beach and deltaic sands. Minor shale and coal are reported.

4.4 Intrusive Rocks

Gabbro, Peridotite, Diabase (Unit 4). Mafic and ultramafic rocks of Triassic or Permian age are scattered throughout the area. A large band is exposed approximately 8 km north of Port Alberni.

Although mapped as intrusive, some of these rocks may be basal flow units of the Karmutsen Formation.

Island Intrusions (Unit 9). Exposures of mainly quartz diorite and lesser biotite-hornblende granodiorite occur throughout the area and are assigned an age of Middle to Upper Jurassic. Intrusive contacts with Sicker and Vancouver Group volcanic rocks are characterized by transitional zones of gneissic rocks and migmatite although contacts with Karmutsen Formation volcanic/sedimentary rocks are sharp and well defined. Skarn zones are reported at the contact of Island Intrusion rocks with Quatsino Formation limestone and less frequently with Buttle Lake Formation limestone.

Tertiary (Catface or Sooke) Intrusions (Unit 21). Sills and stocks of mainly hornblende-quartz diorite and dacitic hornblende-feldspar porphyry plus lesser leucocratic quartz monzonite intrude Nanaimo Group sedimentary rocks and Sicker Group rocks in the area.

4.5 Structure

The Buttle Lake Arch, Cowichan-Horne Lake Arch and Nanoose Uplift are north-northwesterly trending axial uplifts and are

believed to be the oldest structural elements in south central Vancouver Island. Uplifting occurred before the late Cretaceous, and possibly before the Mesozoic (Muller and Carson, 1969). Sicker Group volcanic and sedimentary rocks occur at the core of these uplifts.

Asymmetric southwest verging anticlinal structures characterized by sub-vertical southwest limbs and moderately dipping northeast limbs are reported at Buttle Lake and in the Cameron-Nitinat River area. Intense shearing and metamorphism to chlorite-actinolite and chlorite-sericite schist occurs in steep and overturned limbs of folds. Overlying Buttle Lake Formation limestones are relatively undeformed except where they are thin.

Vancouver Group units are not as intensely folded; gentle monoclinical and domal structures have been mapped. However, Karmutsen Formation volcanic rocks locally conform to the attitude of underlying Myra and Buttle Lake Formations (J.E. Muller, 1980).

Some early Mesozoic faulting occurred in the area prior to emplacement of Island Intrusions. Middle to Upper Jurassic intrusive activity (Island Intrusions) occurred along northwesterly trends.

Extensive west-northwest trending faulting occurred during the Tertiary and is best illustrated by large displacements of Nanaimo Group sediments. The north trending Alberni Valley fault is traced over 45 miles and displaces a section of Karmutsen Formation approximately 5,000 feet (Muller and Carson, 1969).



4.6 Economic Setting

The Sicker Group, and to a lesser extent, the Vancouver Group of volcanic rocks, have been explored intermittently since the 1890's for gold and base metal mineralization.

Until recently, deposits of copper and gold-silver in quartz veins and shear zones hosted by mafic to intermediate volcanic rocks and base metal plus gold-silver skarn deposits were the most widely recognized economic and subeconomic metal concentrations in the Port Alberni area. Placer mining for gold was carried out during the 1940's in various localities, especially in the China, Mineral and Corrigan Creeks area.

The volcanogenic massive sulphide deposits of Westmin Resources Ltd., first discovered in 1917 although not recognized as volcanogenic until the late 1960's, occur at Buttle Lake, approximately 70 km northwest of the Port Alberni area. Four zones of mineralization consisting of the ore minerals sphalerite, chalcopyrite, galena, tetrahedrite-tennantite plus minor bornite and covellite, are hosted by pyritic rhyolitic to rhyodacitic volcanic and pyroclastic rocks of the Myra Formation.

Proven reserves of the Lynx (open pit), Price and Myra deposits are 1,021,400 T grading 1% Cu, 0.9% Pb, 7.4% Zn, 0.06 oz Au/T, 2.6 oz Ag/T (1983). Published reserves of the H-W zone are 15,232,000 T averaging 2.2% Cu, 5.3% Zn, 0.3% Pb, 0.07 oz Au/T and 1.1 oz Ag/T (Walker, 1983). In the 3 years 1980 to 1982, there were 895,048 T of ore milled producing 16,109,000 lbs Cu,



96,356,000 lbs Zn, 14,231,000 lbs Pb, 56,000 oz Au, 2,528,000 oz Ag and 129,000 lbs Cd.

Another volcanogenic massive sulphide deposit in the Sicker Group is the Twin J Mine near Duncan on Mount Sicker, about 65 km east-southeast of the Fitzwater Group. Two parallel orebodies, each containing pyrite, chalcopyrite, sphalerite, and minor galena in a barite-quartz-calcite gangue and chalcopyrite in quartz, occur in schists believed to have been derived from acidic volcanics (Myra Formation).

Total production from 1898 to 1964 was 305,770 tons producing 44,491 oz Au, 934,522 oz Ag, 21,053,360 lb Cu, and 45,864,654 lb Zn with at least 362,854 lb Pb and 10 lb Cd.

Six past producing mines occur in the Port Alberni area. The Thistle Mine produced 2,760 oz Au, 2,120 oz Ag and 681,425 lbs Cu from 6,920 T of ore. It was originally considered to be a skarn deposit (J.S. Stevenson, 1944, D.J.T. Carson, 1968). Disseminated and massive sulphide mineralization occurs as lenses and bands within pyritic quartz-sericite schist and at the contact of quartz-sericite schist with chloritized mafic volcanic rocks (Sicker Group). Disseminated sulphide mineralization occurs throughout the host rocks. The deposit is now believed to be of syngenetic-volcanogenic origin. It is located 3.5 km north of the Fitzwater Group.

The Havilah Mine (1,046 T produced 259 oz Au, 1,404 oz Ag) and the Vancouver Island Gold Mine (483 T produced 384 oz Au, 52 oz Ag) are quartz vein deposits hosted by andesite and andesite tuff of the Sicker Group.



The Black Panther Mine is a quartz vein deposit hosted by a shear zone in Sicker Group andesite and diorite located 3 km northeast of the Fitzwater Group. Production of 1890 T of ore yielded 509 oz Au, 953 oz Ag, 12,319 lbs Pb and at least 4,478 lbs Zn and 498 lbs Cu.

Other past producers in the area include the 3-W Mine ('limited' production of Au-Ag) and the Corrigan Creek Mine (116 T of ore grading 4.0 oz Au/T, 4.3 oz Ag/T, 0.23% Cu, 1.1% Pb), both quartz vein deposits hosted by diorite and granodiorites (Island Intrusions) and both located just west of the Aft claim.

Significant base metal and gold deposits and occurrences of the Sicker Group in the Port Alberni area and of the Vancouver Group and Island Intrusions in the vicinity of the Fitzwater Group of claims are summarized below (Figure 4).



4.7 Mineral Occurrences

1. Vancouver Island Gold; (Victoria, L.205G; Alberni, L.206G; Missing Link, L.214G; Alberni Consolidated) Au Ag Cu

Geology:

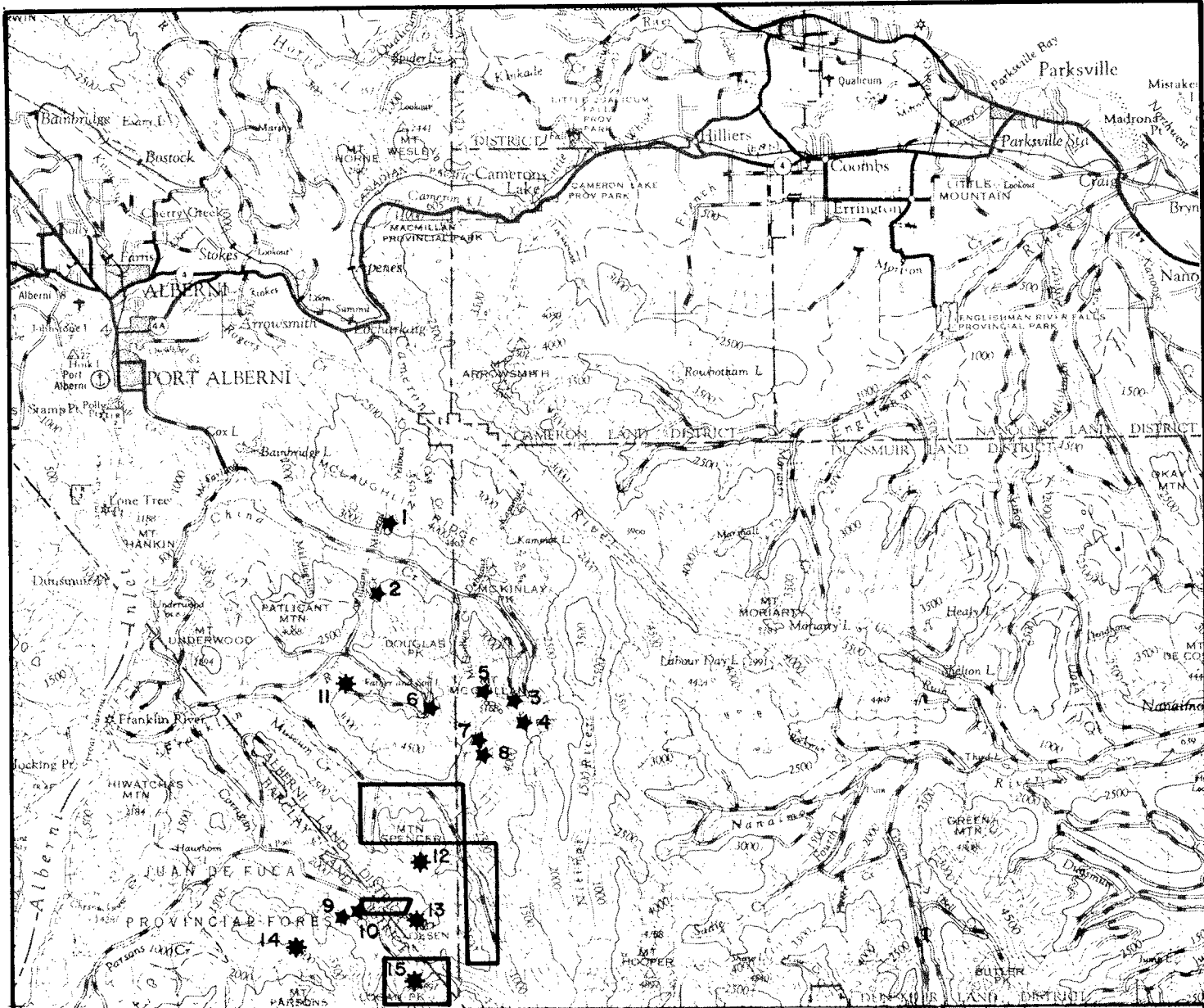
The area is underlain by highly altered massive, tuffaceous, slightly porphyritic, and amygdaloidal andesites of the Sicker Group. Three main quartz veins follow well developed shears and contain a small amount of pyrite and some free gold. As well, a 40 foot wide shear zone has been extensively altered by ankerite, quartz stringers, occasional pyrite veinlets, and kaolinitization.

Economic Features:

Recorded production in 1896, 1898, 1933-36, and 1939 totals 483 tons of ore yielding 384 oz Au, 52 oz Ag, and 194 lb Cu.

The Mac vein is traced for 250 feet and ranges from 3 to 18 inches wide, averaging 5 to 6 inches. Sixty-three samples taken over the 250 feet averaged 6 inches in width and 3.69 oz/ton Au. The highest assay was 20 oz/ton Au. A 40 ton shipment from the Mac vein returned 2.9 oz/ton Au and 0.5 oz/ton Ag. (Ref. 1-1934)

The Belcher vein is exposed discontinuously for 950 feet and ranged from almost nothing to 4 feet in width, averaging 6 to 12 inches in the upper adit. Gold content is reported to be low except in the shaft and stope workings. Recent sampling results show from 0.003 to 0.29 oz Au/ton and from 0.06 to 0.10 oz Ag/ton over 5 foot lengths (Ref. 3).

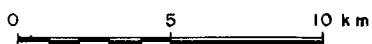


GOLD DEPOSITS AND OCCURRENCES

1. Vancouver Island Gold Mine
2. Regina
3. Golden Eagle
4. B & K
5. Havilah
6. Thistle
7. Black Panther
8. Black Lion
9. 3-W
10. Corrigan Creek

BASE METAL OCCURRENCES

11. Upper Franklin R.
12. Mary Group
13. Mt. Olsen Cu Showing
14. Parsons Creek
15. Arland's Showing



SCHREIBER RESOURCES LIMITED

MINERAL OCCURRENCE
LOCATION MAP
FITZWATER GROUP

Project No:	V 188	By:	T. N.
Scale:	1 : 250,000	Drawn:	J. S.
Drawing No:	4	Date:	MAY, 1985.



MPH Consulting Limited



The Dunsmuir vein is exposed in trenches for about 400 feet and ranges up to 10 inches in width. No assays are reported (Ref. 1-1936).

The Waterfall vein is exposed for 108 feet and is 3 inches to 2.5 feet wide. Gold assays were low in sampling done by Vancouver Island Gold Mines Ltd., except for two samples which ran 1.4 oz Au/ton over 3 inches and 11.8 oz Au/ton over 6 inches (Ref. 1-1934). This illustrates the very spotty nature of free gold distribution.

Seventy-nine chip samples taken from the carbonatized shear zone by the BCDM assayed from nil to 0.16 oz/ton Au over widths of 5 and 10 feet (Ref. 1-1936).

A 1934 BCDM report stated that there is a possible relationship between bands of sediments and gold mineralization, as the gold values in the Mac vein are concentrated just above a bed of argillaceous sediments, and are low below that.

History:

1895: Alberni, Chicago, Warspite, Victoria claims staked; dispute over ownership.

1896: Alberni Consolidated Mining Co.; won dispute, shaft at 40 feet and a tunnel being driven, two tons of ore shipped from a smaller vein (Dunsmuir?) uphill from main vein, open cut on 8-30 inch vein on Chicago claim.

1897-98: An English company built a 10 ton per day 8 stamp mill and only made two clean-ups. Results unknown.

1933-39: Vancouver Island Gold Mines Ltd. (NPL); R.W. Williams leased the reverted Crown Grants in 1933 and turned them over to Vancouver Island Gold Mines. Numerous open cuts were made, 5 adits totalled 1905 feet including various raises, etc. on the quartz veins and 2 adits totalling 277 feet and 12 strippings were made on the carbonatized shear zone. A total of 403 tons of ore was mined. In 1936 a 35 ton pilot mill was built, but only milled a few tons of ore before the operations were ceased due to operating difficulties. In 1939 some rehabilitation work was done in the Mac adits and 48 tons of ore were shipped.

1964: Gunnex Ltd.; visited property, some sampling. Mapping planned for 1966.

1973-74: Keywest Resources Ltd.; (Sam Group) sampling in Belcher adits, prospecting, geological mapping on surface and underground.

1976: Western Mines Ltd.; (Tasha-Shannon and Rupert-Dog claim groups) reconnaissance geological mapping and soil sampling.

References:

- 1) MMAR 1895-650, 1896-6, 1897-566, 1898-1132, 1943-F2-4, 1936-F25-30, 1944-148
- 2) GEM 1973-230, 1974-173
- 3,4) AR 4915, 6153
- 5,6) GSC P68-50 p38
Map 1963-49
- 7) Gunnex #6
- 8) Minfile 92F079



2. Regina (L.55G) Au Ag Cu

Geology:

Lenses and veinlets of quartz with pyrite, chalcopyrite, some galena, and Au and Ag values occur in shears in silicified and pyritized Sicker Group andesite. Some reports also mention sphalerite in the quartz. Another type of showing occurs in highly silicified and leached pyritic, ankeritic andesite which contains gold values.

Economic Features:

The quartz lenses and silicified zones vary up to 2 feet in width but the mineralized portions appear to be very discontinuous. A grab sample of quartz with considerable pyrite, chalcopyrite, and galena from the dump assayed at Au 0.66 oz/ton, Ag 14.0 oz/ton (Ref. 1-1944). A large, highly oxidized bulk sample from the carbonatized zone assayed Au 0.64 oz/ton, Ag trace (Ref. 1-1944). A sample from 20 tons of ore on the dump (possibly hand sorted) in 1930 returned Au \$3.60/ton, Ag 5 oz/ton, Cu 5.0% (Ref. 1-1930). A grab sample from 40 tons of high grade hand-picked ore on the dump in 1964 assayed 0.02 oz/ton Au, 1.8 oz/ton Ag, 2.57% Cu, 1.98% Pb, and 9.01% Zn (Ref. 7).

History:

1898: Alberni Gold Development Syndicate; granted Crown Grants L.54, 55, 57.
1930: E. Maralia; an open cut and an incline shaft a few feet deep. Twenty tons of ore from this work on a dump.



1944: E. Marillia; no recent work. Five adits totalling 288 feet, a 30 foot incline shaft, 2 open cuts, and a 5 foot pit at the entrance to one of the adits exist. All probably date back to the late 1890's.

1964-65: Gunnex Ltd.; visited the workings, sampling, prospecting, in the general area.

1976: Western Mines Ltd.; (Tasha) geological mapping 1:14,400, soil sampling.

References:

- 1) MMAR 1898-1197, 1930-291, 1944-148-150
- 2) EBC 1976-111
- 3) BCDM Bull 1 p132
(Special Report #5, 1936)
- 4) AR 6153
- 5,6) GSC P68-50 p38
Map 1963-49
- 7) Gunnex #7
- 8) Minfile 92F078

3. Golden Eagle (L.198G) Au

Geology:

A vein of ribbon-quartz cuts a small intrusion of feldspar porphyritic diorite and contains pyrite, minor sphalerite, galena, chalcopyrite, and arsenopyrite (about 10% total sulphides) and gold values. Sicker Group volcanics and bedded cherts occur in the area.



Economic Features:

The vein varies from a few inches to 8 feet, averaging about 3.5 feet in width and has been traced in outcrop for 400 feet along strike and 325 feet vertically. An assay of \$56/ton Au, 3 oz/ton Ag, and 1% Cu is reported, and assays of up to \$103/ton Au are reported to have been obtained in 1894 (Ref. 1-1899). A tunnel 500 feet below the surface showing never intersected the vein despite being driven 1500 feet beyond the estimated intersection point of 600 feet.

History:

1892: the discovery of 2 quartz veins by prospectors searching for the source of the China Creek placer gold prompted the original claims to be staked.

1893-1902: Various individuals and/or companies; 4 adits totaling 205 feet in upper workings, an adit driven at a lower level to avoid snowslides from 1896-1902 reached 2100 feet without intersecting mineralization, "development work" of an unspecified nature.

1964-65: Gunnex Ltd.; prospecting and silt sampling in the general area. Also visited the lower adit and a showing near Summit Lake (B and K?) where rock samples were taken.

References:

- 1) MMAR 1893-1080, 1894-773, 1895-651, 1896-7, 556,
1897-566, 1898-1132, 1899-607, 779, 785,
1902-230, 1944-G150
- 2) AR 10194

- 3,4) GSC P68-50 p38
Map 49-1963, 17A
- 5) Gunnex #12
- 6) Minfile 92F080

4. B and K Au Ag

Geology:

Many widely scattered narrow quartz veins containing pyrite, and minor galena, sphalerite, and chalcopyrite with Au and Ag values occur in andesite tuffs and flows, basalt, and local black chert; often in shear zones. A zone of strongly carbonatized andesite 6 to 25 feet wide contains minor pyrite, galena, and sphalerite in narrow veinlets. In the southern workings, veins are surrounded by a strong ankeritic carbonate alteration zone.

Economic Features:

The "high-grade" vein has been exposed in open cuts for 130 feet and is 5 to 8 inches wide. A sample assayed at 3.84 oz/ton Au, 3.2 oz/ton Ag, 0.06% Cu over 5 inches. This vein may be on Golden Eagle property (Ref. 4).

A vein near the north end of the workings varies from 2 to 6 inches to a 6 foot stringer zone in width. Assays of 2.56 and 2.26 oz/ton Au are reported (Ref. 1-1944).

A sample from quartz nodules containing galena and pyrite from an open cut on two parallel shears, each 18 inches wide, ran 0.82 oz/ton Au and 0.7 oz/ton Ag (Ref. 4).



No assays are reported from the carbonatized zone. Many other quartz veins, from a hairline to 8 inches wide, for which no assays are available, occur within an area about 1250 feet long.

History:

- 1938-40: Angus Beaton, Ed Keisig; staked claims, prospecting, 17 open cuts and trenches, stripping.
- 1964-65: Gunnex Ltd.; prospecting and silt sampling in the general area.

References:

- 1) MMAR 1944-151
- 2,3) GSC P68-50 p38
Map 49-1963
- 4) Gunnex #13
- 5) Minfile 92F081

5. Havilah (King Solomon, Storm, Red Rose, Spike, Sol 14)
Au Ag Cu Pb Mo

Geology:

Sicker Group andesite is intruded by Jurassic diorite and by Tertiary hornblende-feldspar and quartz-feldspar porphyry stocks, dykes, and sills. Ribbon-quartz veins and lenses containing abundant pyrite, sphalerite, and galena and lesser chalcopyrite and arsenopyrite occur in shears in the andesite. Occurs on the same shear zone as Black Panther (#7 below) and Black Lion (#8 below).



Economic Features:

The recorded production in 1936 and 1939 totals 1046 tons yielding 259 oz Au, 1,404 oz Ag, 4243 lb Cu, and 12,676 lb Pb. There are three main veins.

The Gillespie vein is the lowest. It is 3 to 34 inches wide and has been traced for 650 feet in 5 trenches. Most of the production came from the Gillespie vein. Assays range up to 0.4 oz/ton Au, 2.2 oz/ton Ag, 0.4% Pb, and 0.30% Zn over widths from 4 to 63 inches (Ref. 1-1936,1944). Some oxidized samples taken over 1 foot assayed as high as 7 oz/ton Au and 3 oz/ton Ag. Average grade of the ore shipped from the Gillespie vein was 0.235 oz/ton Au and 1.28 oz/ton Ag (Ref. 1-1939). The vein was faulted off in two of the three adits, and could not be re-discovered.

The Alberni vein consists of a 10 foot wide by about 70 feet long zone of intense shearing containing 1 to 3 lenticular quartz veins 4 to 24 inches wide. Assays of 3.66 oz/ton Au and 5.2 oz/ton Ag over 4 inches and 1.8 oz/ton Au and 2.3 oz/ton Ag over 20 inches are reported (Ref. 9).

The McQuillan vein was prospected with a 57 foot adit. It ranges up to 8 inches in width. Assays of up to 1 oz/ton Au over 8 inches and 1.6 oz/ton Ag over a different 8 inches, are reported (Ref. 9).

A fourth vein on the easterly side of the cirque 1 to 2 feet wide assayed 0.16 oz/ton Au and 0.6 oz/ton Ag from an oxidized 2 foot sample (Ref. 9).



History:

1893: First mentioned in MMAR (King Solomon).

1895: An open cut on the McQuillan(?) vein.

1936-44: Havilah Gold Mines Ltd.; claims staked in 1934 and 1936 by Walter Harris. In 1936, 7 tons of ore were mined from the upper showings (Alberni and McQuillan veins). In 1938-39, 2072 feet of drifting, crosscutting and raising on three levels on the Gillespie vein resulted in production of 1039 tons of ore. Diamond drilling and prospecting were also carried out. A high-line tram was built to transport ore and supplies between the base camp and the mine. Little if any work was done after 1939.

1947: Nitinat Mines Ltd.; owned the ground.

1964: Gunnex Ltd.; silt sampling in McQuillan creek drainage, rock sampling wherever mineralization was observed.

1974-77: Cominco Ltd.; geological mapping 1:4800, soil sampling, trenching, several IP and resistivity surveys.

References:

- 1) MMAR 1893-1080, 1895-652, 1936-F30, 1939-88, 1944-G153
- 2) GEM 1974-172
- 3) EBC 1975-E95, 1976-E111, 1977-E110
- 4-6) AR 5354, 6138, 6643
- 7,8) GSC P68-50 p38
Map 49-1963, 17A
- 9) Gunnex #11
- 10) Minfile 92F082



6. Thistle (L.91G) Au Ag Cu

Geology:

The mine area is underlain mainly by mafic volcanic and volcani-clastic rocks of the upper(?) Myra Formation (Ref. 10). The orebodies are reported to occur in two shear zones, 130 feet apart within a 200 foot wide band of limestone. The limestone is extensively altered to "diopside rock" composed of fine grained diopside, and is partly underlain by and surrounded on three sides (NE, SE, SW) by fine grained diorite. Strong faults located along the orebodies extend downward beyond the known ore limits (Ref.8).

The ore consists of chalcopyrite and some pyrite in a gangue of dirty grey calcite and a little quartz. Magnetite disseminated through much of the calcite is locally oxidized to hematite. Early workers considered this to be a replacement deposit; Carson (1968) believed it to be a type of skarn deposit; more recently it has been postulated that Thistle is a volcanogenic massive sulphide type of deposit.

Economic Features:

Production from 1938 to 1942 amounted to 6920 tons of ore which contained 2760 oz Au, 2120 oz Ag, and 681,425 lb Cu. The ore apparently occurs in lenses ranging from less than an inch up to at least 18 by 25 feet with much faulting cutting lenses off.

Assays from 2.71 to 10.2% Cu, 0.226 to 1.22 oz/ton Au, and 0.15 to 1.33 oz/ton Ag over apparent true thicknesses of 15 cm to 4 m are reported from chip sampling. The Panther Road showing, 1.4 km SE of the Thistle Mine, assayed at 9.00% Cu, 0.490 oz/ton Au, and 0.05 oz/ton Ag.



History:

- 1896: First staked.
- 1899: A. Watson et al; lower adit (500 adit) driven 65 feet but hadn't intersected ore that was 6 to 8 feet wide on surface, upper adit (300 adit) driven 90 feet but also hadn't intersected an orebody. A pit on one of the surface showings.
- 1901: Alberni Gold and Copper Co. Ltd.; roadbuilding, development work.
- 1902: J.M. Watson; granted Crown Grant L.91G.
- 1927: A. Watson et al; a 25 foot tunnel with a 20 foot crosscut, all in ore (300A adit?).
- 1938-40: United Prospectors Ltd.; shipments of ore were made from open cuts and glory holes and the old dumps.
- 1941-42: Vancouver Island Diamond Drilling and Exploration Co.; 1789 tons of ore mined, shut down July 25, 1942.
- 1944: The workings existing on the property included four adits totalling 527 feet, an 18 by 25 foot stope 60 feet long, two glory holes totalling about 6000 cubic yards, and several open cuts. Owned by United Prospectors Ltd., but no work done since 1942.
- 1962: Hunting Survey Corp.; regional aeromagnetic survey, geological mapping at the mine area.
- 1964-65: Gunnex Ltd.; visited the area, but no mapping done, silt sampling and prospecting in the general area.
- 1965: Vananda Explorations Ltd.; magnetometer, SP, and geochemical surveys, 4 diamond drill holes totalling 1745 feet.
- 1979: Kargen Development; linecutting, soil sampling.
- 1982: McQuillan Gold; airborne EM and magnetometer surveys, soil sampling, rock sampling, trenching, EM survey.



1983-84: Westmin Resources Ltd.; geological mapping, rock sampling (for assay, whole rock geochem, and thin sections), and prospecting.

References:

- 1) MMAR 1899-778, 1901-1097, 1902-307, 1927-340, 1928-366, 1930- 291, 1939-40,88, 1940-73, 1941-71, 1942-66, 1944-154-157, 1965-238
- 2-5) AR 8088, 9126, 10237, 11064
- 6,7) GSC P68-50 p38
Map 49-1963
- 8) Gunnex #10
- 9) Minfile 92F083
- 10) Nexus Resource Corporation; News Release dated November, 1983.

7. Black Panther (Nitinat) Au Ag Pb Zn Cu

Geology:

Ribbon-quartz lenses containing variable amounts of sulphides, mainly pyrite with minor galena and sphalerite occur in a shear zone which follows the contact of andesite lava on the west and diorite breccia on the east. The wall-rock of the shear is strongly altered by ankeritic carbonate for widths of a few inches to 30 feet which locally is cut by numerous quartz stringers.

Economic Features:

The shear zone has been traced for at least two miles but the best mineralization is at the Black Panther workings where quartz

lenses are one inch to three feet thick and up to 40 feet long. Four samples containing "heavy sulphides" from the 2700 and 2790 adits assayed from 2.30 to 2.88 oz/ton Au (Ref. 1-1944). A 1964 assay from the dump is reported as 1.16 oz/ton Au, 2.1 oz/ton Ag, 0.14% Cu, and 1.73% Pb (Ref. 4).

Production in 1947, 1948, and 1950 totalled 1890 tons which yielded 509 oz Au, 953 oz Ag, 498 lb Cu, and 12319 lb Pb, and at least 4478 lb Zn.

History:

1936: Claims first staked, upper adits driven shortly thereafter.

1939: Walter Harris; prospecting, drifting, cross-cutting (presumably those adits referred to above).

1941: Pioneer Gold Mines of B.C. Ltd.; drove the 2700 (Main) adit and the 2450 adit (about 1200 feet of drifting, crosscutting, and raising), 1631 feet of diamond drilling.

1944-48: Nitinat Golds Ltd. (became Nitinat Mines Ltd. in 1947); built a 25 ton flotation mill, mining, shipped 68.5 tons of concentrate.

1962: Hunting Survey Corp.; regional aeromagnetic survey, geological mapping at the workings.

1964-65: Gunnex Ltd.; visited the workings, took a rock sample.

References:

- 1) MMAR 1939-88, 1941-71, 1944-157, 1945-114, 1947-182
- 2,3) GSC P68-50 p38
Map 49-1963



- 4) Gunnex #14
- 5) Minfile 92F084

8. Black Lion Au Ag

Geology:

Similar to Black Panther (#7 above), as the Black Lion is on the southerly extension of the same shear zone as Black Panther.

Zones of quartz-sulphide (pyrite, galena, gold values) stringers are found in a strongly carbonatized zone 10 inches to 9 feet wide with local evidence of strong shearing.

Economic Features:

Open cuts exposed the "vein" for 175 feet with another exposure located 1300 feet to the south. The quartz-sulphide stringer zone is 12 to 18 inches wide. A sample of quartz and sulphides assayed 1.2 oz/ton Au. Samples of quartz-sulphide stringers and carbonatized country rock ranged from 0.27 to 0.43 oz/ton Au. The carbonatized rock itself assayed at trace to 0.03 oz/ton Au (Ref. 1-1944, Ref. 4).

History:

- 1941: Bralorne Mines Ltd.; prospecting, open cuts.
- 1942-64: Some diamond drilling is reported to have been done sometime during this period.
- 1964-65: Gunnex Ltd.; silt sampling and prospecting in the general area.



References:

- 1) MMAR 1944-159
- 2,3) GSC P68-50 p38
Map 49-1963
- 4) Gunnex #15
- 5) Minfile 92F085

9. 3-W Mine Au Ag

Geology:

Three quartz veins mineralized with pyrite, sphalerite and galena occur in granodiorite and diorite.

Economic Features:

No. 1 vein measures 300 feet long by 4 to 10 inches wide and is exposed in one adit, four open cuts. A channel sample near the adit assayed 6 oz Au/T, 4 oz Ag/T over 4 inches (1935).

No. 2 vein measures 160 feet long by 8 inches wide. A channel sample assayed 7.3 oz Au/T, 5.3 oz Ag/T over 10 inches (1935).

No. 3 vein measures 308 feet long by 2 to 14 inches wide. A channel sample assayed 1.3 oz Au/T, 0.9 oz Ag/T over 14 inches (1935). Grab samples assayed 7.25 oz Au/T, 5.3 oz Ag/T; 1.86 oz Au/T, 2.0 oz Ag/T; and 0.18 oz Au/T, 0.2 oz Ag/T (1964).

Production to 1935: Small shipments of ore were made.



History:

1898-1899: Various owners; staking, prospecting, one adit driven.

1930-1935: Franklin River Gold Mines Ltd.; development, some mining.

1940's: Various; prospecting, sampling.

1963-1964: Gunnex Ltd.; prospecting, sampling.

10. Corrigan Creek Mine Au Ag Cu Pb

Geology:

Sulphide bearing quartz veins occur in granodiorite and diorite.

Economic Features:

The vein measures 1,000 feet long by 2 inches to 2 feet wide. The best grab sample assayed 1.7 oz Au/T, 3.99 oz Ag/T (1970). A grab sample taken by MPH assayed 18,000 ppb Au, 3,060 ppm Pb, 12,000 ppm Zn, 11.2 ppm Ag.

Production 1899-1935 116 T of ore grading 4 oz Au/T, 4.3 oz Ag/T, 0.23% Cu, 1.1% Pb (reported by W.G. Stevens and Associates Ltd.; 1970 part of 3-W Mine?).

History:

1899-1935: Various; some development, mining (part of 3-W Mine?).

1970: John Cotowick; limited mining operations.



Comments:

The property was visited by MPH workers in September, 1983. An adit was found approximately 500 m west of Corrigan Creek, north-east of Mount Olsen. A sample of mineralized dump material assayed 18,000 ppb Au, 3060 ppm Pb, 12,000 ppm Zn, 11.2 ppm Ag.

11. Upper Franklin River Occurrences Cu

Geology:

Chalcopyrite and malachite occur within quartz stringers and epidotized shears in andesite (Vancouver Group).

Economic Features:

One zone measures a few feet long by 2 feet wide; a grab sample assayed 1.74% Cu. Another zone is 5 to 6 feet wide. Grab samples assayed 2.75% Cu and 1.42% Cu.

History:

1963-1965: Gunnex Ltd.; ground magnetometer survey, soil sampling, prospecting.

12. Mary Group Occurrences (Cup 1-6) Cu Zn Pb Ag Au

Geology:

Chalcopyrite, bornite, malachite, pyrrhotite plus sphalerite mineralization occurs in quartz veins, sheared andesite (Vancouver



Group) and feldspar porphyry plus skarn in Vancouver Group limestone (Quatsino Formation).

Economic Features:

Five main zones of mineralization. Showing 1 is 200 feet long by 50 feet wide; best channel sample assayed 0.33% Cu over 3 feet.

Showing 2 is 1 foot wide; a grab sample assayed 1.2% Cu, 0.58 oz Ag/T.

Showing 3, mineralized skarn, is approximately 10 feet wide; the best grab sample assayed 0.45% Cu, 3.3% Zn, 0.34 oz Ag/T. The best channel samples assayed 2.61% Zn, 0.29% Cu over 5 feet; 2.23% Zn, 0.33 oz Au/T over 2 feet; and 6.03% Zn, 0.59% Cu over 2.5 feet.

Showing 4 is 16 feet long by 15 feet vertical; Cu, Zn assays were low.

Showing 5, massive pyrrhotite, minor chalcopyrite is 60 feet long by 4 to 6 feet wide; a grab sample from a 1 foot wide quartz vein assayed 2.72% Cu, 6.22% Pb, 0.65% Zn, 28.9 oz Ag/T; a grab sample of massive pyrite in quartz assayed 0.20 oz Au/T, 25.3 oz Ag/T.

Gold Valley Resources Ltd. reports surface assays of up to 5.57% Cu over 23 feet.

The Summit Pass Mining Corp. report of 1979, apparently based largely on Cominco's work, mentions the following mineralization:



a zone 200-400' wide by 1200 feet long with disseminated to massive pyrrhotite, pyrite, and chalcopyrite to 2 feet thick along fractures and joint surfaces; pods and disseminations of chalcopyrite and pyrrhotite in discontinuous lenses in a zone 50 feet by 1000 feet; and massive sulphides (Cu-Ag-Mo) in narrow veins in volcanics; plus five other lesser mineralized zones. As well, Gunnex's DDH 66-7 is reported as having cut 81 feet averaging 1.22% Cu and 0.066% MoS₂ from 151 to 232 feet.

History:

1964-66: Gunnex Ltd.; prospecting, detailed mapping, trenching and pitting, soil sampling, magnetometer, EM, SP, IP surveys, 8 AX DDH totalling 3064 feet.

1967: Cominco Ltd.; geological mapping, horizontal loop EM, magnetometer, 4 AX DDH totalling 1503', 5 Winkie DH totalling 411'.

1976: Gold Valley Resources Ltd.; 3 DDH totalling 852'.

1979-81: Summit Pass Mining Corp; prospecting, summary of previous work.

References:

AR 6134, 8177, 9292

13. Mount Olsen Copper Showing Cu Ag Au

Geology:

Chalcopyrite and pyrrhotite mineralization occur in a 2 foot wide quartz vein within dioritic rocks close to a contact with Vancouver Group volcanic rocks.



Economic Features:

A grab sample assayed 1.52% Cu, 0.5 oz Ag/T, 0.02 oz Au/T.

History:

Undated: Unknown; old workings reported in the area.

1963-1965: Gunnex Ltd.; mapping, prospecting.

14. Parsons Creek Occurrence Cu Ag minor Au

Geology:

Numerous narrow quartz veins (4 to 14 inches) mineralized with considerable chalcopyrite occur in sheared andesite and volcanic breccia (Vancouver Group volcanics).

Economic Features:

Seven mineralized veins cover a strike length of 3,000 feet. The best channel samples were 13.57% Cu, 0.8 oz Ag/T, 0.04 oz Au/T over 0.5 feet, 6.58% Cu, 32.39 oz Ag/T, 0.01 oz Au/T over 1.5 feet. A grab sample of massive chalcopyrite assayed 13.08% Cu, 1.15 oz Ag/T, 0.01 oz Au/T (1966).

History:

1930's-1940's: Unknown; prospecting, pitting, adits.

1965-1966: Gunnex Ltd.; stripping, trenching, channel sampling, silt sampling, prospecting.



15. Arland's Showing Cu Mo Pb Zn

Geology:

Copper and molybdenum mineralization occur in altered sheared sulphide-rich diorite and within quartz veins hosted by diorite.

Feldspar porphyry and aplite dykes are also mineralized. Cu-Pb-Zn mineralization is reported in a quartz vein south of the Cu-Mo showing.

Economic Features: Assays not reported.

History:

Undated: Unknown; an adit was driven to intersect the Cu-Pb-Zn occurrence.

1964-1965: Noranda Exploration Co. Ltd.; prospecting, silt sampling.



5.0 LOCAL GEOLOGY AND WORK DONE

The Fitzwater Group occurs in an area mapped by Muller (1980) as being underlain mainly by Karmutsen Formation basic volcanics overlying a narrow north-northwest trending band of Buttle Lake Formation limestone. The limestone is mapped as being in fault contact with another band of Karmutsen volcanics east of Rift Creek. Earlier mapping by Muller (1977) shows similar geology except that the area east of Rift Creek is mapped as Sicker Group volcanics, rather than Karmutsen volcanics. Mapping by Gunnex Ltd. in 1964 basically agrees with Muller's 1977 mapping. Upper Vancouver Group rocks (Bonanza Subgroup, Quatsino Formation) intruded by Jurassic Island Intrusions are mapped in the area south and west of the Fitzwater Group.

On the basis of the preliminary mapping carried out by MPH Consulting Limited in June, 1984, Myra Formation lithologies appear to be much more widespread than previously believed. Outcrops of felsic tuff and cherty andesitic tuff were found along the Museum Main road as far as 1.5 km west of the previously mapped limit of Sicker Group rocks. Hematitic tuffs occurring on the both sides of Rift Creek are indicative of the basal levels of the Myra Formation, while well banded tuff and chert higher up the east side of the valley may be from the middle unit of the Myra Formation.

As shown in Figure 5, the geology of the area has been extensively re-interpreted. A major fault running southwest along the upper part of Rift Creek and diagonally up the northern slope of Mount Spencer, offsets a fault-repeated sequence of Sicker Group



approximately 1300 m to the right. Much more mapping is needed to substantiate this interpretation however. Large areas previously mapped as Karmutsen Formation are now believed to be underlain by rocks of the Myra Formation.

A total of 11 rock grab samples was collected and lithogeochemically analyzed for Au, Ag, Cu and Zn. Nine of the samples were selected for whole rock analysis and computer processing of whole rock results. Full sample descriptions and results are attached in Appendix II, whole rock analyses are included in Appendix IV, while the computer interpretation of the whole rock data is included in Appendix III.

Computer processing of the whole rock analyses indicates that the volcanics are of tholeiitic to calc-alkaline basaltic (to andesitic) composition.

Several large (up to 30 cm) pieces of massive pyrite float were found in the northeastern corner of the Fitzwater Group. A sample (64520) ran 130 ppb Au and 1.0 ppm Ag with low Cu and Zn. The only outcrops located uphill from the float (within about 200 m) were of somewhat recrystallized, sandy limestone (Buttle Lake Formation). Near the massive pyrite float is a piece of pyritic "conglomerate" measuring about 1 m by 30 cm by 30 cm. It is made up of heavily weathered massive pyrite cementing together rounded pebbles to small cobbles of various rock types. It has the appearance of being formed by precipitation of pyrite from ground-water seeping through the overburden, and may be more or less in place.

South of the pyrite float, several outcrops of pyritic (up to 3% pyrite) andesite with abundant small mafic phenocrysts occur (Nitinat Formation??). Two samples from the andesite (64521 and 64522) were both slightly anomalous in Cu and 64521 ran 210 ppb Au. The andesite is epidotized and locally sericitized.



Samples 64522 and 64523 (850 m to the southeast) are the most geochemically anomalous samples with respect to alteration patterns indicative of volcanogenic base metal and/or gold mineralization. These anomalous samples are on strike with each other and therefore appear to outline a favourable horizon for locating volcanogenic massive sulphides (possibly an extension of the Thistle Mine ore horizon).

On the west side of Rift Creek, along road M3, Buttle Lake limestone outcrops occur. A layer of siltstone 10 m thick was observed within the limestone, as were local thin (10 cm) interbeds of black chert. A sample from a pyrite-bearing aplitic dyke about 2.5 m wide cutting the limestone ran 50 ppb Au, low Ag, Cu, Zn (64519).

Six samples taken from Myra Formation(?) andesitic and hematitic tuffs on both sides of Rift Creek all returned low values for Au, Ag, Cu, Zn. Widespread pervasive carbonatization and/or carbonate veining and local epidotization occurs in these rocks.

Regional mapping by Gunnex Ltd. indicates that the Rodeo claim is underlain by Karmutsen Formation basic volcanics intruded by diorite and/or quartz diorite of the Island Intrusives. The Aft claim is entirely underlain by Island Intrusion dioritic rocks. Muller (1977 and 1980) remapped the basic volcanics as belonging to the Bonanza Subgroup. Arland's Showing (#15 above) occurs on the Rodeo claim, and both the Corrigan Creek Mine (#10 above) and the Mount Olsen Copper Showing (#13 above) occur within 1 km of the Aft claim.

As neither of these claims was visited, the accuracy of regional mapping is not known.



6.0 RECOMMENDED WORK PROGRAM

6.1 Plan

PHASE I

Phase I will consist of geological mapping and rock sampling, covering the portion of the Fitzwater Group claim block underlain by Sicker Group rocks.

Geological mapping will serve to define property geology and structure and will hopefully locate and define areas of surface mineralization. Rock samples taken during geological mapping will be used for lithochemical analysis, as well as whole rock analysis and possibly for thin section study. Surface showings located during mapping will be sampled and analyzed for Au, Ag, Cu, Pb, and Zn. Whole rock analyses will be used to aid in naming rock types and to locate diagnostic alteration patterns of massive sulphide mineralization including K_2O , MgO , and FeO enrichment and Na_2O and CaO depletion. Thin section study of representative samples from the various rock units mapped will assist in distinguishing between similar rock types and accurately naming them.

Phase I is estimated to cost \$31,000, to be spent over a period of 14 days.



PHASE II

Phase II will consist of geological, geochemical, and geophysical surveys on cut grids located over target areas outlined during Phase I. Grid lines are to be located 100 m apart. Soil sampling stations will be at 50 m intervals along the grid lines, while magnetometer and VLF-EM readings will be taken at 25 m intervals. Soil samples will be geochemically analyzed for Au, Ag, Cu, Pb, and Zn. Geophysical surveys may locate areas of anomalous conductivity and/or magnetic activity indicative of sub-surface massive sulphide zones or mineralized structural features such as faults, shear zones, or quartz veins. Geophysics may also assist in geological interpretation.

Phase II work is estimated to cost \$70,000 and is estimated to take 22 days to complete. Phase II is designed to provide detailed geophysical, geological, and diamond drill targets for a Phase III program.

**Phase II**

Mobilization/demobilization				\$ 700
Personnel				
Geologist	(1)	14 days @ \$350	\$4,900	
Linecutters/ Soil samplers	(2)	22 days @ man day 175	7,700	
Geophysical technician	(1)	22 days @ 250	5,500	
Sampler	(1)	22 days @ 150	<u>3,300</u>	21,400
Rental Equipment				
Magnetometer & Base Station Recorder		14 days @ \$130/day	1,820	
VLF-EM Receiver		14 days @ \$ 30/day	420	
Communication	22 days @ \$ 30/day		660	
Vehicle	22 days @ 90/day		1,980	
Cat & operator	5 days @ 500/day		<u>2,500</u>	7,380
Support Costs				
Rooms	@ \$80/day	22 days	1,760	
Board	@ 100/day	22 days	2,200	
Map prep. & air photos			500	
Supplies			<u>300</u>	4,760
Analysis				
Geochemical soils (Au Ag Pb Zn Cu)				
800 samples @ \$8.05			6,440	
Geochemical rocks (Au Ag Pb Zn Cu)				
400 samples @ \$9.85			3,940	
Whole rock assay				
50 samples @ \$38.50			1,925	
Microcomputer processing				
50 samples @ \$12			<u>600</u>	12,905
Consulting/Supervision				
7 days @ \$450			3,150	
Expenses			<u>400</u>	3,550



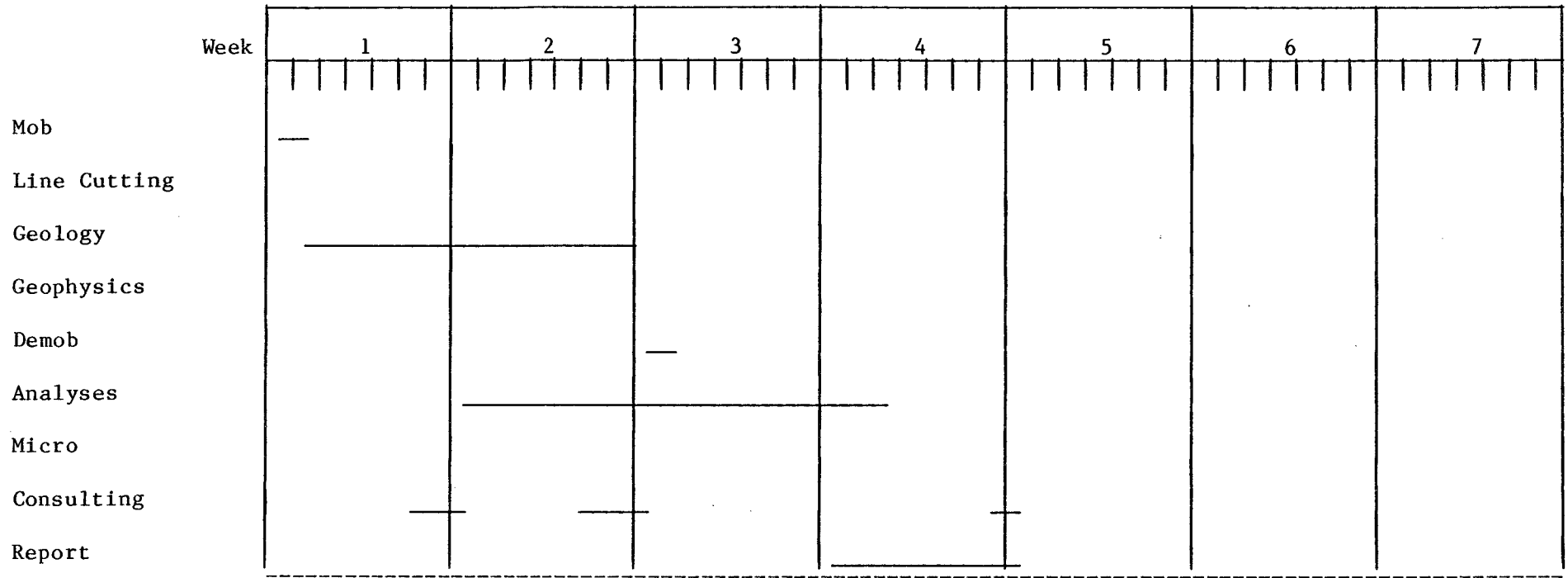
Report		
Geologist	10 days @ \$350/day	\$3,500
Geophysicist	3 days @ 450/day	1,350
Drafting	60 hrs @ 18/hr	1,080
Materials		<u>600</u>
		\$ 6,530
Administration (15% of \$27,125)		<u>4,069</u>
		61,294
Contingency (15%)		<u>9,194</u>
	Total, say	\$70,000
		=====



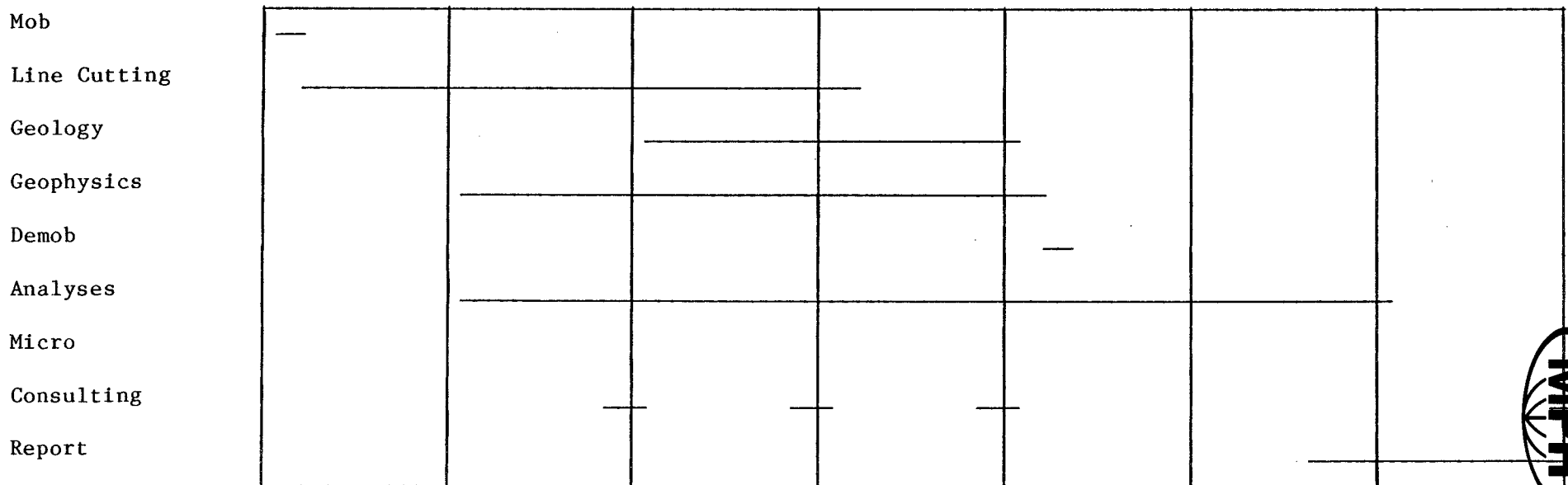
6.3 Schedule

The following table is a summary of the projected time requirements for Phase I and Phase II.

Schedule: Phase I



Schedule: Phase II





7.0 CONCLUSIONS

1. Sicker Group lithologies appear to be much more extensive on the Fitzwater Group of claims than was previously mapped. Rocks believed to belong to the Myra Formation have been located on both sides of Rift Creek and up to 1.5 km further west along Museum Main road than previously mapped.
2. The Myra Formation of the Sicker Group is known to host volcanogenic massive sulphide deposits.

The massive sulphide deposits of Westmin Resources Ltd. at Buttle Lake, 88 km northwest of the Fitzwater Group, contain reserves totalling 16.25 million tons grading 2.1% Cu, 5.4% Zn, 0.3% Pb, 0.07 oz/ton Au, and 1.2 oz/ton Ag (1983), are hosted by the Myra Formation.

3. The Thistle mine, located about 3.5 km north of the Fitzwater Group is believed to be a volcanogenic massive sulphide deposit. The mine produced 2760 oz Au, 2120 oz Ag, and 681,425 lb Cu from 6920 tons of ore from 1938 to 1942.

The Thistle mine trend and its related pyritic andesite host appear to occur on the northern end of the property. The values of up to 210 ppb gold in these rocks is considered highly anomalous and worthy of further work. Whole rock geochemistry has outlined a strike length of 850 m of favourable geochemical features that indicate that volcanogenic base metal and/or gold mineralization may be present.



4. Numerous precious and base metal bearing quartz vein deposits, mainly hosted by Sicker Group volcanics, are known in the Port Alberni area. Production from the Vancouver Island Gold Mine, Havilah Mine, and Black Panther mine totalled 3419 tons yielding 1152 oz Au, 2409 oz Ag, 4933 lb Cu, and 24,995 lb Pb.
5. The Fitzwater Group has the potential to host economic grade precious and base metal quartz vein deposits.
6. Fracture zones in Karmutsen volcanics mineralized with chalcopyrite, molybdenite, sphalerite, pyrrhotite, and galena such as those found on the Cup claims (#12 in Mineral Occurrence section) could also be present on the Fitzwater Group. The Cup claims are located only 250 m south of the Water claim.
7. An anomalous Au value of 210 ppb Au and somewhat anomalous Cu values were returned from andesitic to dacitic volcanics of the Sicker Group. The source of the massive pyrite float which ran 130 ppb Au and 1.0 ppm Ag has not yet been located.

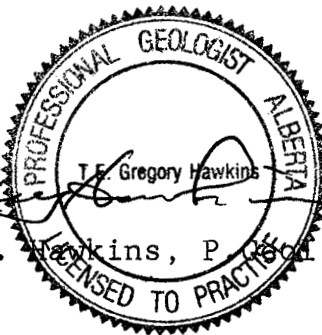
Further exploration including geological mapping and sampling, soil geochemistry, and ground geophysics plus follow-up trenching, detailed geological mapping and sampling, and detailed geophysical surveys is required to assess the economic potential of the property.

8.0 RECOMMENDATIONS

1. It is recommended that both volcanogenic massive sulphide deposits and precious/base metal quartz vein deposits be considered primary exploration targets. A secondary target is Cu-Mo-Zn-Pb-Ag mineralization in fracture zone(s) in Karmutsen volcanics.
2. Phase I work to consist of geological mapping and sampling of the Fitzwater Group underlain by Sicker Group rocks is recommended.
3. Whole rock geochemistry is recommended to aid in classifying rock types and to locate alteration patterns which may indicate the presence of mineralized zones.
4. Petrographic studies on representative rock samples are recommended to assist in accurately differentiating between similar rock types and to aid in identification of rock types.
5. The Phase I work is recommended at an estimated cost of \$31,000 for the Fitzwater Group. The field work is estimated to take 14 days to complete.

6. A Phase II follow-up program, contingent upon the results of Phase I, is recommended to consist of rock sampling, detailed geological mapping and VLF-EM and magnetometer surveys. Estimated cost is \$70,000.

Respectfully submitted,

A circular seal with a serrated outer edge. The text 'PROFESSIONAL GEOLOGIST ALBERTA' is written around the top inner edge, and 'LICENSED TO PRACTICE' is written around the bottom inner edge. In the center, the name 'T.G. Gregory Hawkins' is printed, with a handwritten signature in black ink over it.

T.G. Hawkins, P. G.S.A.

A handwritten signature in black ink, appearing to read 'T. Neale'.

T. Neale, B.Sc.

May 21, 1985



CERTIFICATE

I, T. Neale, do hereby certify:

1. That I am a graduate in geology of The University of British Columbia (B.Sc. 1978).
2. That I have practised as a geologist in mineral exploration for seven years.
3. That the opinions, conclusions, and recommendations contained herein are based on library research and on field examinations made on the property in June and July, 1984.
4. That I own no direct, indirect, or contingent interest in the area, the subject property, or shares or securities of Schreiber Resources Ltd. or associated companies.

A handwritten signature in cursive script, appearing to read 'T. Neale', is positioned above the typed name.

T. Neale, B.Sc.

Vancouver, B.C.

May 21, 1985

BIBLIOGRAPHY

- Carson, D.J.T. 1968: Metallogenic Study of Vancouver Island with Emphasis on the Relationships of Mineral Deposits to Plutonic Rocks; Ph.D. Thesis, Carleton University.
- Clapp, C.H. 1912: Southern Vancouver Island; G.S.C. Memoir 13.
- 1914: Geology of the Nanaimo Map Area; G.S.C. Memoir 51
- Gunnex Ltd. 1966: Mineral Occurrences (Mines, Surface Workings, and Showings), E&N Land Grant, Vancouver Island, B.C.; internal company report.
- Muller, J.E. and Carson, D.J.T. 1969: Geology and Mineral Deposits of Alberni Map-Area, British Columbia (92F); G.S.C., Paper 68-50.
- Muller, J.E. 1977: Geology of Vancouver Island (West Half); G.S.C. Open File 463.
- 1980: The Paleozoic Sicker Group of Vancouver Island, British Columbia; G.S.C. Paper 79-30.
- Neale, T. 1984: Compilation of Mineral Occurrences of the Sicker Group, Vancouver Island, British Columbia; for MPH Consulting Limited.
- Stevenson, J.S. 1945: Geology and Ore Deposits of the China Creek Area, Vancouver Island, British Columbia; Annual Report of the Minister of Mines of the Province of British Columbia, 1944, pp.A143-A161.
- Walker, R.R. 1983; Ore Deposits at the Myra Falls Minesite; Western Miner, May 1983, pp.22-25.



APPENDIX I

LIST OF PERSONNEL
AND
STATEMENT OF EXPENDITURES



List of Personnel and Expenditures

The following expenses have been incurred on the Fitzwater Group of mineral claims as defined in this report for the purpose of mineral exploration on the dates of June 18 and 19, and July 4, 1984.

Personnel:

T. Neale, B.Sc.			
7 days @ \$325		\$2,275	
W. Hoiles, Mining Technician			
2 days @ 250		500	
T.G. Hawkins, P.Geol.			
6 hrs @ 80		<u>480</u>	
			\$3,255.00

Truck Rental:	1.3 days @ \$81	105.30	
	1 day	<u>131.66</u>	
			236.96

Disbursements:

Food, accommodation, transportation (gas, ferries)		179.04	
Analyses - 9 computer analyses @ \$12.00		108.00	
- 11 rock (Au Ag Cu Zn) @ 9.65		106.15	
- 9 whole rock @ 20.00		180.00	
Drafting		362.17	
Phone, courier etc.		<u>145.68</u>	
		1,081.04	

Administration @ 15%		<u>162.16</u>	
			1,243.20

Report Costs - 6 copies @ \$75		<u>450.00</u>	
--------------------------------	--	---------------	--

Total			<u><u>\$5,185.16</u></u>
-------	--	--	--------------------------



APPENDIX II

ROCK SAMPLE DESCRIPTIONS
AND
LITHOGEOCHEMISTRY RESULTS



**ROCK SAMPLE DESCRIPTIONS
AND
LITHOGEOCHEMISTRY RESULTS**

Sample No.	Description	Au ppb	Ag ppm	Cu ppm	Zn ppm
64518	Andesite tuff - fine grained, 1-2% pyrite disseminated in patches to 3 mm. Cut by veins of grey calcite up to about 1 cm thick, many fine, irregular, hairline stringers of chlorite, and some epidote veins 1 mm to 2 cm wide (perhaps epidote is an alteration envelope about a fracture).	10	0.2	160	84
64519	Aplitic dyke - about 5% pyrite disseminated in cubes to about 1 mm. The dyke cuts limestone (Buttle Lake Fm) and is 2.5 m wide. The dyke is extremely sheared for 70 cm on the south side and for 1 m on the north side, with only 80 cm of "massive" dyke left.	50	0.2	10	110
64520	Massive pyrite - float. Composed mainly of fine grains with some coarser crystalline areas with grains up to 4 mm.	130	1.0	20	28
64521	Andesite - many mafic phenocrysts to 3 mm, fairly frequent mica flakes up to 5 mm, extensively epidotized and epidote stringered. Contains 1-3% disseminated pyrite in cubes up to 1 mm or aggregates up to 3-4 mm.	210	0.2	200	70
64522	Andesite - a layer(?) of darker, more mafic-rich rock with abundant goethitic pockets up to several cm long by 5 mm wide and goethitic boxwork. Minor very fine pyrite (possibly arsenopyrite) disseminated and in hairline stringers.	10	0.2	110	96
64523	Andesite tuff to agglomerate - sample taken from a rusty weathering zone of tuff. Outcrop pervasively carbonatized and extensively calcite veined. No pyrite observed, only rust stain.	10	0.2	58	90



Sample No.	Description	Au ppb	Ag ppm	Cu ppm	Zn ppm
64524	Andesite tuff - heavily to extremely foliated, weathers green to orange (cut by Fe-carbonate veins to 1.5 cm wide). Hematitic layers to 2 m thick present. Locally it appears to be somewhat bleached. Minor disseminated pyrite.	10	0.2	86	88
64525	Hematitic andesite tuff - from same outcrop as 64524. No mineralization noted in the hematitic layers.	10	0.2	20	66
64526	Andesite tuff - highly altered. Pervasive carbonatization, local extreme epidotization with lesser general epidotization. Very high limonitic content - about 20% in masses up to 30 by 30 by 1-2 cm thick.	10	0.2	10	64
64527	Andesite tuff - similar to 64526 but not as altered (taken 8 m N of 64526). Limonitic masses apparently in layers up to 1 cm thick (weathered pyrite veins??). Cut by carbonate veins and contains carbonate pods up to 1 cm across, but not pervasively carbonatized. Associated with purple hematitic tuff(?).	10	0.2	8	62
64528	Dacite tuff - fine grained, grey, contains about 2% disseminated pyrite.	10	0.2	176	90



APPENDIX III

COMPUTER INTERPRETATION
OF
WHOLE ROCK ANALYSES

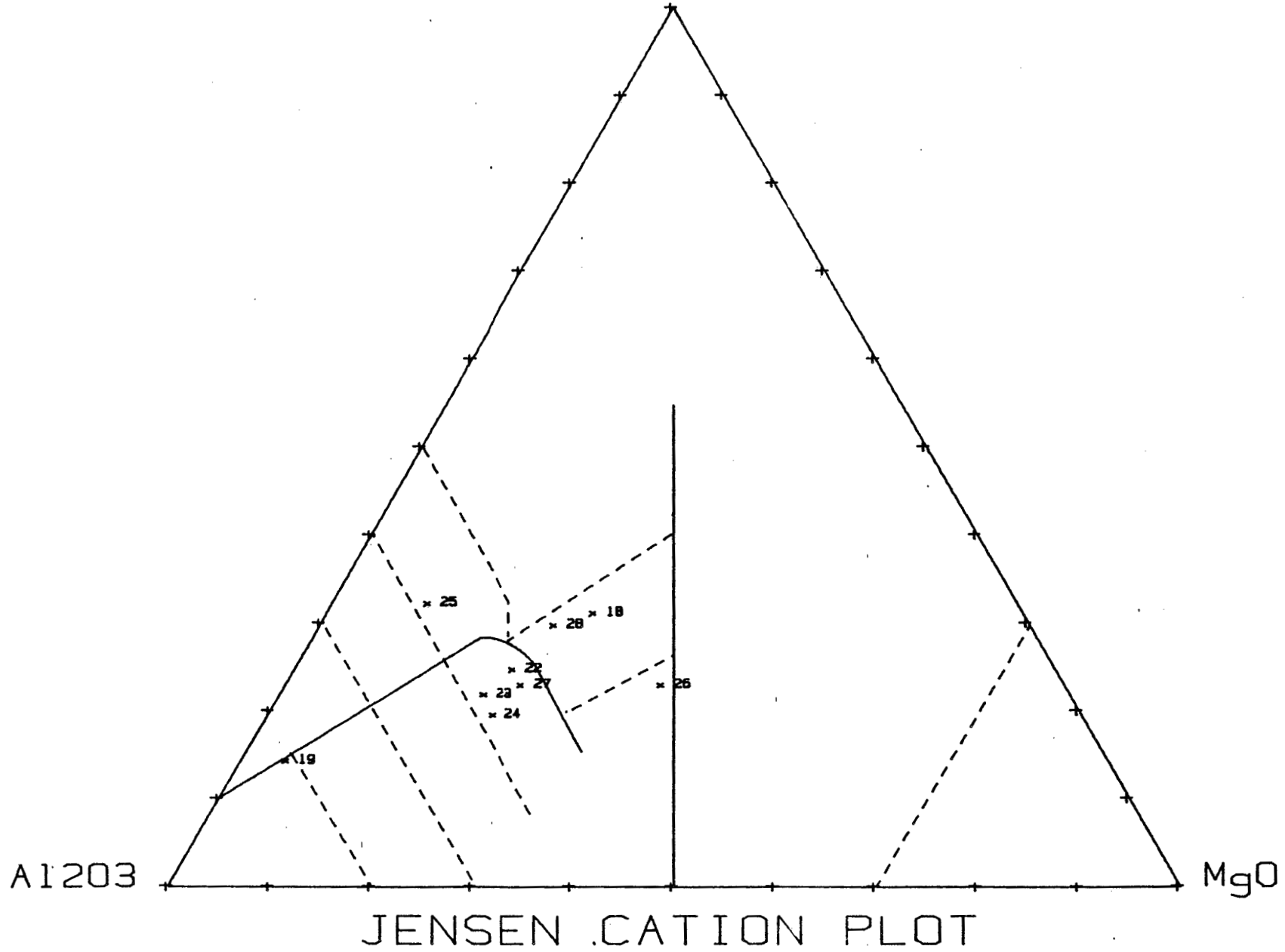


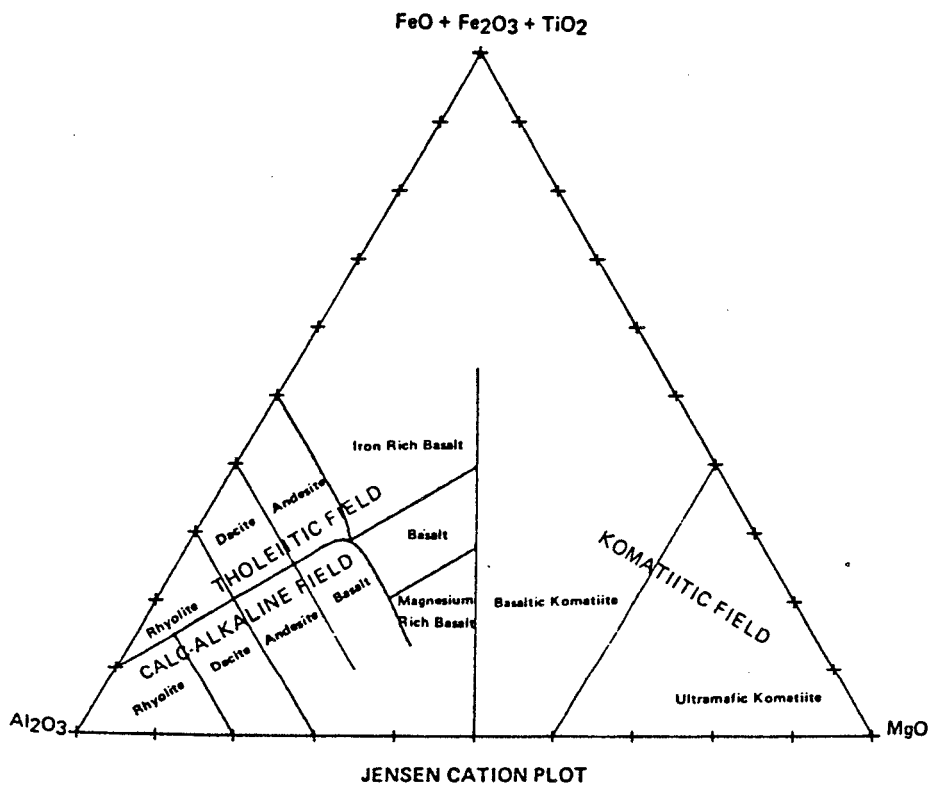
EVALUATION SUMMARY

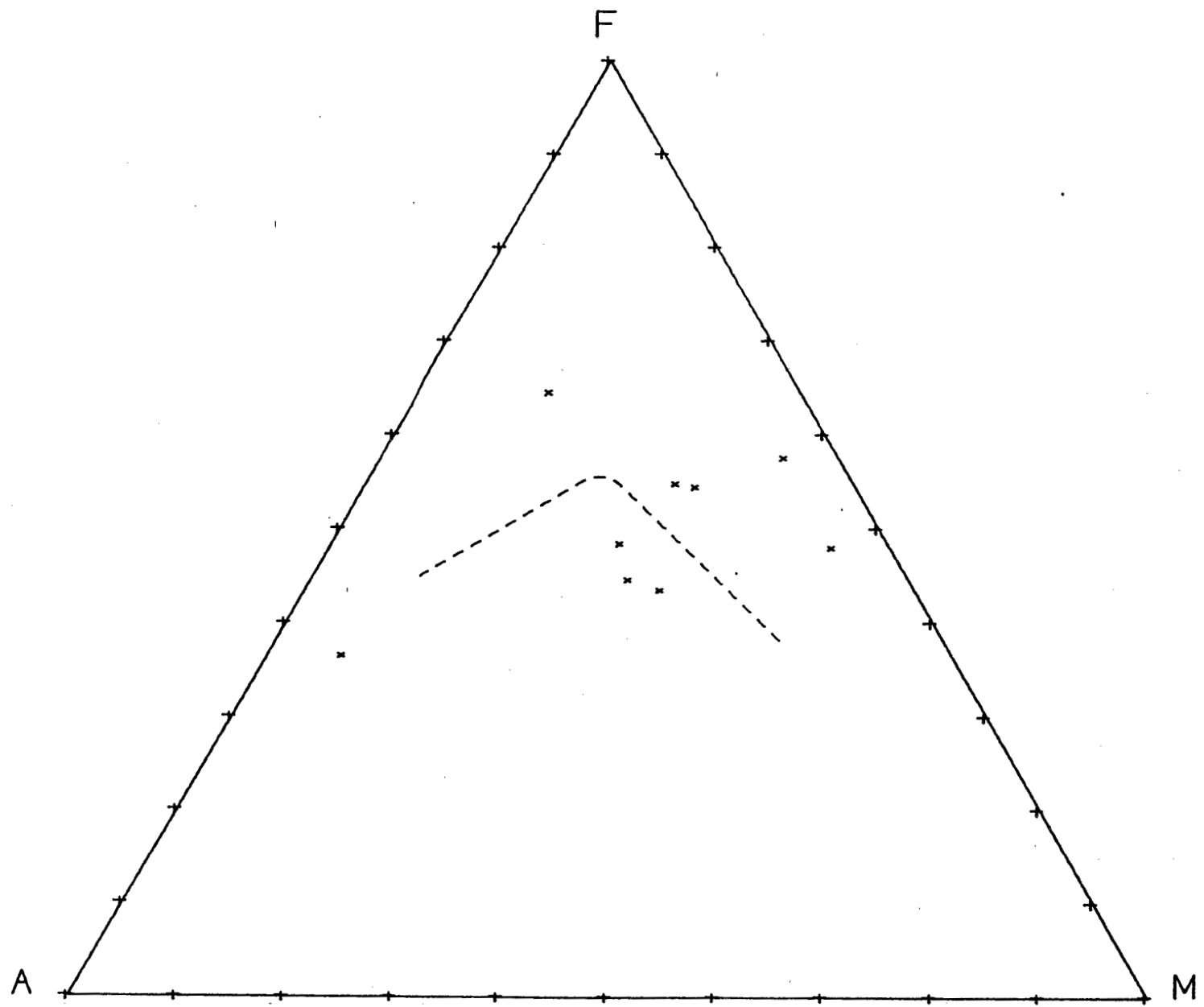
SAMPLE	Base Metals EVALUATION	Gold EVALUATION
16	- *	-
19	+	- **
22	- ***	- ****
23	- ****	- ****
24	-	- ***
25	-	- **
26	-	+
27	- **	- **
28	- *	- **

- "less favourable geologic environment"
- + "favourable geologic environment"
- * anomalous geochemical factors present (10% of factors per symbol)

Fe₂O₃+FeO+TiO₂+MnO







AFM DIAGRAM





APPENDIX IV

CERTIFICATES OF ANALYSIS



ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 SOUTH SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL: (604) 299-6910

TO: MPH CONSULTING LTD.
301-409 GRANVILLE ST.
VANCOUVER B.C.

CERTIFICATE NO. : 64181- 1

INVOICE NO. : 4168

PROJECT: ~~V 152~~
V 152

DATE ANALYSED : JUNE 27 1984

SAMPLE#	PPM	PPH	PPM	PPB
	Cu	Ag	Zn	Au
A 64518	160	0.2	84	10
A 64519	10	0.2	110	50
A 64520	20	1.0	28	130
A 64521	200	0.2	70	210
A 64522	110	0.2	96	10
A 64523	58	0.2	90	10
A 64524	86	0.2	88	10
A 64525	20	0.2	66	10
A 64526	10	0.2	64	10
A 64527	8	0.2	62	10
A 64528	176	0.2	90	10

RECEIVED JUL 12 1984

CERTIFIED BY : *J. Rossbach*



ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

JO : MPH CONSULTING LTD.
301-409 GRANVILLE STREET
VANCOUVER, B.C.

CERTIFICATE#: 85015
INVOICE#: 5133
DATE ENTERED: FEB. 14, 1985
FILE NAME: MPH85015
PAGE # : 1

PROJECT: V188
TYPE OF ANALYSIS: ASSAY

PRE FIX	SAMPLE NAME	% SiO2	% Al2O3	% Fe2O3	% MgO	% CaO	% Na2O	% K2O	% TiO2	% MnO
A	64518	48.0	14.0	13.4	6.8	10.2	3.1	0.3	2.2	0.2
A	64519	70.0	14.9	3.6	0.6	1.8	2.1	3.0	0.3	0.1
A	64522	50.0	19.0	12.1	6.0	1.2	3.6	2.1	1.2	0.2
A	64523	54.0	18.5	8.4	5.0	2.0	2.3	2.2	2.2	0.1
A	64524	51.0	13.8	6.0	4.1	8.4	0.9	2.1	1.0	0.1
A	64525	50.0	16.1	12.0	2.0	5.3	1.2	2.8	1.6	0.1
A	64526	44.0	7.7	6.4	5.6	14.4	0.3	0.4	0.2	0.2
A	64527	55.0	12.0	7.0	4.1	6.5	0.3	0.3	0.7	0.2
A	64528	49.0	15.3	12.5	5.9	10.1	2.7	0.8	2.3	0.1

RECEIVED FEB 18 1985

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
301-409 GRANVILLE STREET
VANCOUVER, B.C.

CERTIFICATE#: 85015
INVOICE#: 5133
DATE ENTERED: FEB. 14, 1985
FILE NAME: MPH85015
PAGE # : 1 A

PROJECT: V188
TYPE OF ANALYSIS: ASSAY

PRE FIX	SAMPLE NAME	% LOI
A	64518	3.4
A	64519	3.4
A	64522	4.7
A	64523	5.7
A	64524	12.4
A	64525	8.6
A	64526	20.9
A	64527	10.4
A	64528	2.2

CERTIFIED BY :

Rossbacher



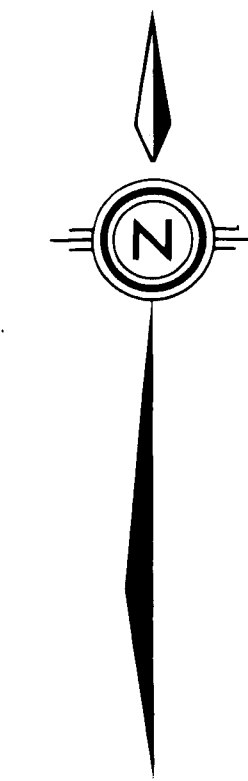
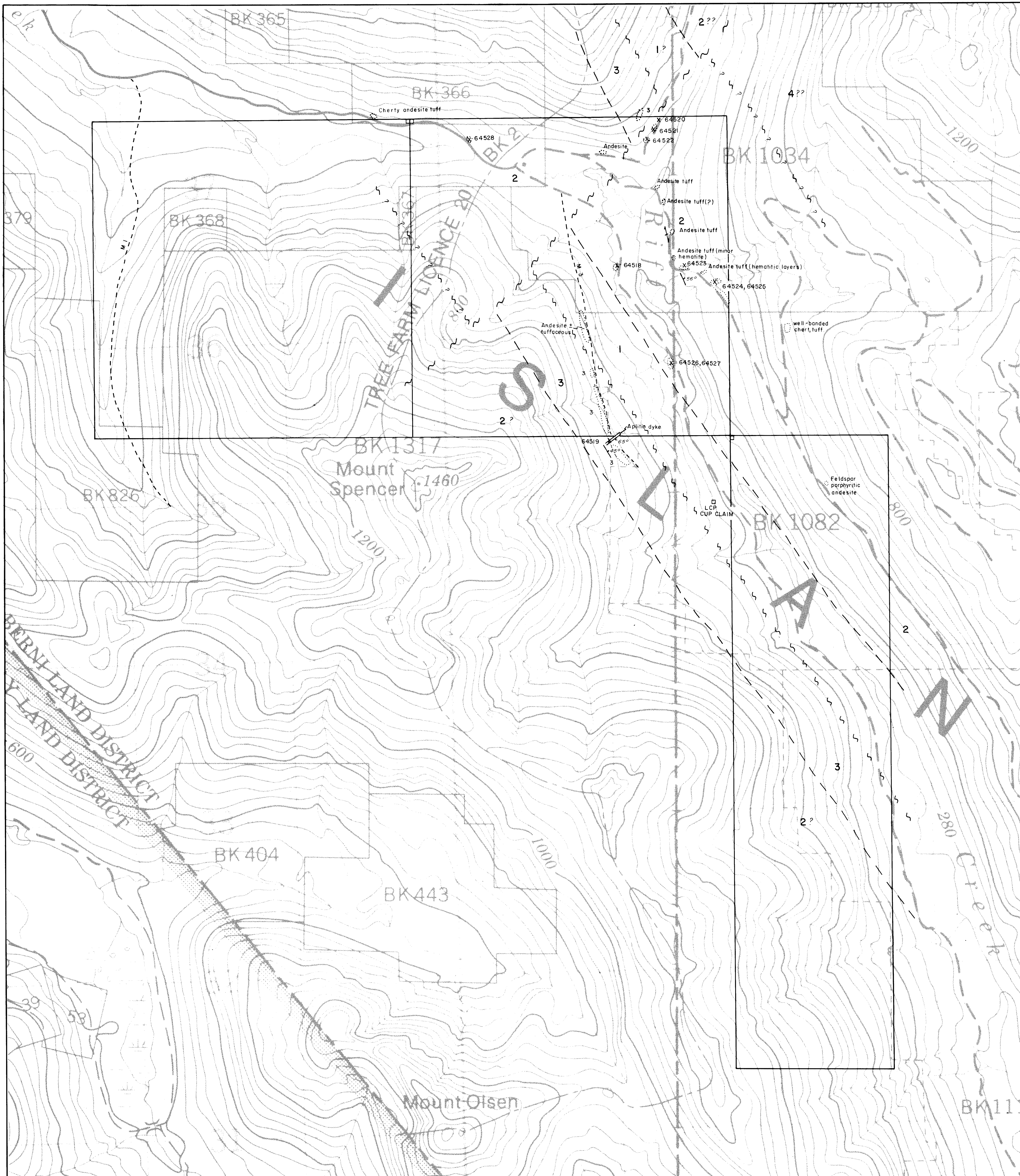
APPENDIX V

ABBREVIATIONS USED IN
MINERAL OCCURRENCES SECTION



Abbreviations Used in Mineral Occurrences Section

AR	B.C. Ministry of Energy, Mines, and Petroleum Resources Assessment Report
BCDM	British Columbia Department of Mines
Bull	Bulletin
Carson	Metallogenic Study of Vancouver Island with Emphasis on the Relationships of Mineral Deposits to Plutonic Rocks; D.J.T. Carson, Carleton University Ph.D Thesis, May, 1968.
EBC	Exploration in British Columbia; B.C. Ministry of Energy, Mines and Petroleum Resources
GEM	Geology, Exploration and Mining in British Columbia; B.C. Department of Mines and Petroleum Resources
GSC	Geological Survey of Canada
Gunnex	Mineral Occurrences, E&N Land Grant, Vancouver Island, B.C.; Gunnex Ltd., 1966
Minfile	B.C. Ministry of Energy, Mines and Petroleum Resources Minfile, Feb. 2, 1984
MMAR	B.C. Ministry of Mines Annual Report
P	Paper



LEGEND

GEOLOGY

- VANCOUVER GROUP**
- 4 KARMUTSEN FORMATION - massive basalt, pillowed basalt, flow breccia; minor andesite and tuff.
- SICKER GROUP**
- 3 BUTTLE LAKE FORMATION - limestone, locally sandy, generally somewhat recrystallized, siltstone layers up to 10m thick, minor chert.
 - 2 MYRA FORMATION - andesitic to dacitic tuff to agglomerate (locally hematitic), cherty tuff, chert.
 - 1 NITINAT FORMATION - andesitic flows & tuff.

SYMBOLS

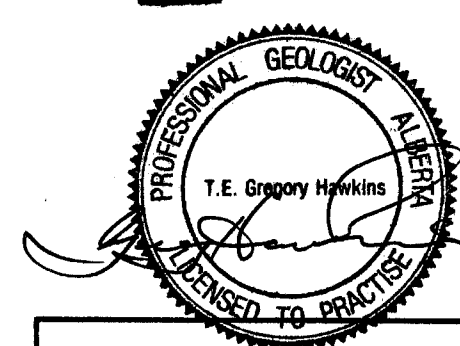
- Claim line with Legal Corner Post.
- Logging roads with MacMillan Bloedel number.
- Geological contact (position approximate).
- Geological contact (type unknown but postulated to be a fault; position very approximate).
- Fault (position approximate).
- Bedding, foliation.
- Approximate area of outcrop.
- Rock sample location and number.

LITHOGEOCHEMISTRY RESULTS

Sample No.	Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
64518	10	0.2	160	84
64519	50	0.2	10	110
64520	130	1.0	20	28
64521	210	0.2	200	70
64522	10	0.2	110	96
64523	10	0.2	58	90
64524	10	0.2	86	88
64525	10	0.2	20	66
64526	10	0.2	10	64
64527	10	0.2	8	62
64528	10	0.2	176	90

GEOLOGICAL BRANCH ASSESSMENT REPORT

13,668



To accompany Report by T.E. Gregory, No. 176, dated 21/05/85

SCHREIBER RESOURCES LIMITED

PROPERTY PLAN, GEOLOGY AND ROCK SAMPLING FITZWATER GROUP VICTORIA, ALBERNI MINING DIVISIONS

Project No: V 188	By: T.N.
Scale: 1:10,000	Drawn: J.S.
Drawing No: 5	Date: MAY, 1985

MPH MPH Consulting Limited