85-620-13904

MPH

REPORT ON GEOLOGICAL MAPPING, PROSPECTING, AND ROCK SAMPLING

McQUILLAN CLAIM

ALBERNI MINING DIVISION
BRITISH COLUMBIA
NTS 92F/2 49°08'N LAT. 124°37'W LONG.
FOR
HOLLYCROFT RESOURCE CORPORATION
SEPTEMBER 16, 1985

T. NEALE, B.Sc.

6/86

SUMMARY

A four-day exploration program on the Hollycroft Resource Corporation McQuillan claim has been completed by MPH Consulting Limited. Work carried out on the claim included detailed geological mapping, prospecting, and rock sampling of road cuts in areas indicated by previous work to contain anomalous concentrations of gold and/or copper.

Geological mapping reveals the claim to be underlain by a complex, poorly resolved, interlayered and intergradational succession of basaltic pillowed flows; broken and whole pillow breccias; various basaltic volcaniclastics including agglomeratic lapilli tuff, crystal and lithic tuff, and cherty tuff; jasper; thick basaltic flows; and dacitic agglomeratic lapilli tuff. All of the rocks belong to the Upper Paleozoic Sicker Group, however it is not clear whether they are part of the Nitinat Formation or Myra Formation, or both. The Sicker Group sequence appears to be upright, northwest to north trending, and dipping shallowly to moderately (20-40°) to the southwest.

Basaltic Sicker Group flows are cut by Tertiary(?) feldspar(-hornblende) porphyritic andesite dykes in the southeast corner of the claim. Similar dykes are closely associated with past-producing gold mines in the area such as the Havilah Mine.

Two lithologic intervals have been identified which warrant further exploration due to their similarity to portions of the sequence hosting Westmin Resources Ltd.'s volcanogenic massive sulphide deposits in the Sicker Group at Buttle Lake. The two intervals are:

1) a 150 to 250 m wide unit of dacitic agglomeratic lapilli tuff occurring in the southwestern part of the claim, and;

2) a hematitic jasper horizon(?) and the hematitic, basaltic rocks immediately overlying and underlying it in the southeastern part of the claim.

A roadcut exposure of pyritic ankerite-altered basalt, which returned a result of 220 ppb Au and 11.2 ppm Ag in 1983 was re-sampled and returned weakly anomalous silver (2.4 ppm Ag) and only 10 ppb Au. Mineralization in this outcrop appears to be fracture-controlled and of lesser interest than the two intervals mentioned above.

A roadcut exposure of pillowed basalt along the McQuillan Creek road returned results of 1840 ppm Cu, 112 ppm Zn, 1.8 ppm Ag. This mineralization may also be fracture controlled, but as it is located on strike with the favourable jasper/hematitic basalt horizon it should be investigated further.

Phase I work, consisting of detailed geological mapping and sampling with soil sampling on a grid placed over target areas, is recommended to be carried out on the McQuillan claim.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

HOLLYCROFT RESOURCE CORPORATION

GENERAL LOCATION MAP
McQUILLAN CLAIM
ALBERNI MINING DIVISION

Project No:	V 166	By:	T. N.
Scale:		Drawn:	J. S.
Drawing No:	1	Date:	SEPT. 1985.

MPH Consulting Limited

1.0 INTRODUCTION

This report represents the compilation of field work carried out by MPH Consulting Limited on the McQuillan claim at the request of Mr. N. Cowling, President, Hollycroft Resource Corporation for the purposes of fulfilling assessment work requirements. Geological exploration carried out included detailed geological mapping, prospecting, and rock sampling of roadcut exposures, some of which were indicated by previous work to contain anomalously high Au and/or Cu contents. The work was carried out from June 18 to June 22, 1985 by G. Benvenuto, Ph.D.

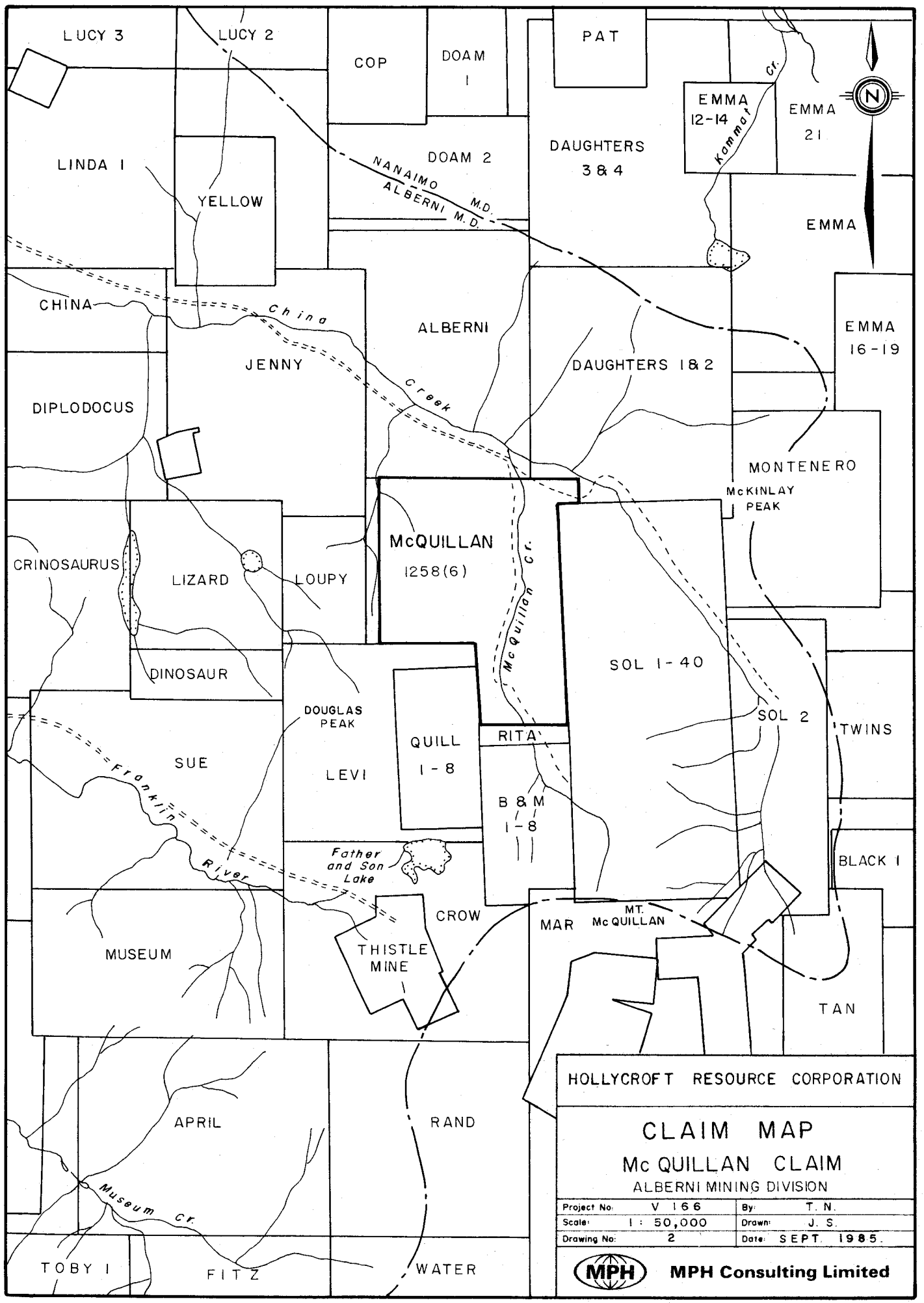
Included in the report is a summary of previous geological and mining exploration activity in the area, a description of regional and property geology, and a discussion of the economic setting of the claim.

2.0 LOCATION, ACCESS, TITLE

The McQuillan claim is located 17 km southeast of Port Alberni on the northeastern slopes of Douglas Peak, in the Alberni Mining Division of British Columbia. It is centred at approximately 49°08'N latitude, 124°37'W longitude on NTS mapsheet 92F/2 (Figure 1).

Access is provided by the China Creek Road of MacMillan Bloedel Ltd. A network of logging roads crosses the western half of the claim, while a single logging road up McQuillan creek traverses the eastern portion of the claim.

The McQuillan claim is owned by Nexus Resource Corporation. The record number is 1258(6), the claim is 20 units in size and has an anniversary date of June 23, 1986 (Figure 2). Hollycroft Resource Corporation is the operator of the claim by virtue of an option agreement with Nexus.



HOLLYCROFT RESOURCE CORPORATION

CLAIM MAP

Mc QUILLAN CLAIM

ALBERNI MINING DIVISION

Project No:	V 166	By:	T. N.
Scale:	1 : 50,000	Drawn:	J. S.
Drawing No:	2	Date:	SEPT. 1985.

MPH Consulting Limited

3.0 PREVIOUS WORK

Government geological work in the area includes mapping by C.H. Clapp (1912), J.E. Muller and D.J.T. Carson (1969), and J.E. Muller (1977 and 1980) and a mineral compilation report by J.S. Stevenson (1945).

A regional aeromagnetic survey flown by Hunting Survey Corp. Ltd. in 1962 covered the claim block.

During the period 1963-1966, Gunnex Ltd. carried out a regional mapping program with some prospecting and silt sampling. They compiled a list of all the known mineral occurrences in the area and visited many of them.

In September, 1983, MPH Consulting Limited visited the McQuillan claim and prepared a preliminary assessment report and a recommended work program (Hawkins and Willoughby, 1983). A sample of mineralized felsic tuffaceous rock taken during the visit returned anomalous Au and Ag values and indicated the possibility of Myra Formation lithologies occurring on the property. A two-phase exploration program including surface geochemistry, geological mapping and sampling, ground geophysics, and follow-up diamond drilling estimated to cost $182,000 was recommended.

A brief program of reconnaissance geological mapping, rock sampling, and prospecting was carried out on the McQuillan claim by MPH Consulting Limited for Nexus Resource Corporation in June 1984 (Neale and Hawkins, 1984). Mapping indicated that all of the claim is underlain by Nitinat Formation volcanics, although Myra

Formation lithologies may be present in the southeastern area of the claim. Anomalous rock sample analytical results of up to 50 ppb Au and 1.2 ppm Ag appear to be related to shear zones. A boulder of felsic tuff which was discovered in the southeastern portion of the claim returned 40 ppb Au, 1.8 ppm Ag, and 800 ppm Zn, indicating the possible presence of mineralized Myra Formation rocks in the vicinity. Feldspar porphyritic dacite dykes which may be genetically related to the gold-quartz vein deposits of the China Creek area cut the volcanics in the southeastern area of the McQuillan claim, indicating potential for locating gold-quartz vein(s) in the area.

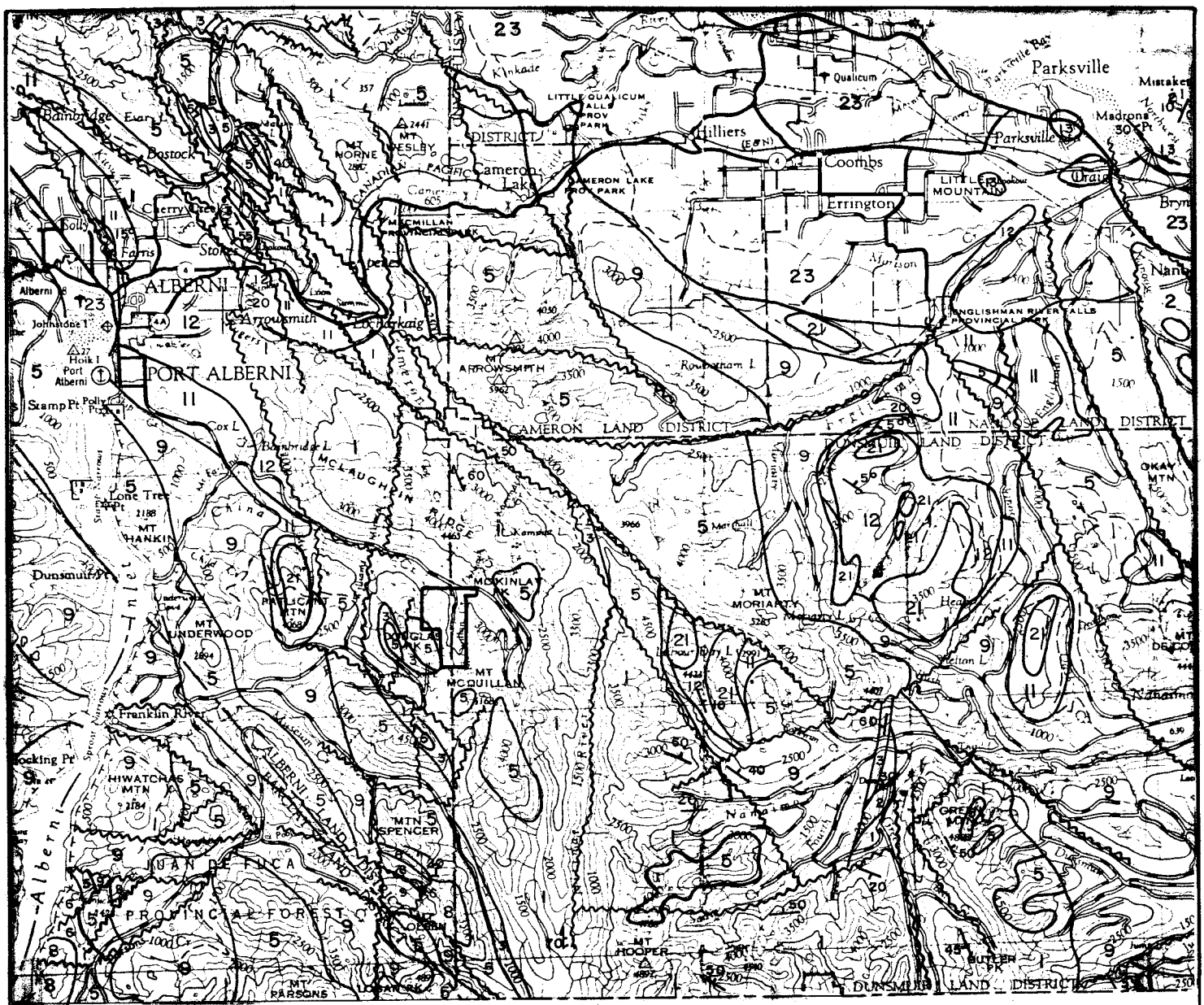
4.0 REGIONAL GEOLOGY

The predominant rock units in the Port Alberni-Nitinat 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 similar Karmutsen Formation by the usual lack of pillow basalts,



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

8 — BONANZA GROUP: andesitic to latitic breccia, tuff, and lava; minor greywacke, argillite, and siltstone.

UPPER TRIASSIC
VANCOUVER GROUP

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.

0 5 10 km

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HOLLYCROFT RESOURCE CORPORATION

REGIONAL GEOLOGY MAP

Mc QUILLAN CLAIM

ALBERNI MINING DIVISION

Project No:	V 166	By:	T.N.
Scale:	1:250,000	Drawn:	J.S.
Drawing No:	3	Date:	SEPT. 1985.

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the abundance of uralite 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 volcaniclastic 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 80 km northwest of the McQuillan claim. There, volcaniclastic 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

southeast 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).

4.3 Bonanza Group

The Bonanza Group (Unit 8) is made up of interbedded lava, breccia, and tuffs ranging in composition from basalt to rhyolite with intercalated beds of marine argillite and greywacke. It 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 Bonanza Group is considered to be of Lower Jurassic age.

4.4 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.

4.5 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 Bonanza Group volcanic rocks are characterized by transitional zones of gneissic rocks and migmatite although contacts with Karmutsen Formation volcanic 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.

4.6 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 subvertical 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 monoclinal and domal structures have been mapped. However, Karmutsen Formation volcanic rocks locally conform to the attitude of underlying Myra and Buttle Lake Formations (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).

4.7 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 70 km southeast of the McQuillan claim. 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.

On the Lara property, 60 km southeast of the McQuillan claim, Aberford Resources Ltd. has completed 40 diamond drill holes on geochemical and geophysical anomalies. In January 1985 an intersection of 26.2 feet (true thickness) of mineralization grading 0.1 oz Au/ton, 1.97 oz Ag/ton, 3.01% Zn, 0.68% Cu, and 0.45% Pb was announced. By July 1985 the discovery zone had been traced for 1,300 feet and to an average depth of 350 feet. The zone is open on both ends and to depth. The zone grades 0.051 oz Au/ton, 1.12 oz Ag/ton, 1.98% Zn, 0.44% Cu, and 0.36% Pb and averages 20.53 feet in true width. A diamond drill hole located 350 feet east of the zone along stroke intersected 12.07 feet (true thickness) of massive sulphide mineralization grading 0.213 oz Au/ton, 8.60 oz Ag/ton, 9.22% Zn, 1.16% Cu, and 2.53% Pb.

The mineralized zone is stratiform and is hosted by a rhyolite porphyry unit of the Sicker Group. Metal ratios of the zone are very close to those of the Buttle Lake mines of Westmin Resources Ltd. The Twin J Mine is located 9 km southeast of the Lara property (i.e on strike) and is geologically similar.

On the Villalta property, massive hematite up to 46 feet thick carries Au. The hematite occurs in a paleo-karst topography at the top of the Buttle Lake Formation. A reserves estimate of 200,000 tons indicated ore grading 0.1-0.2 oz Au/ton with minor base metals content was made in 1981. Asarco Exploration Co. of Canada Ltd. and Falconbridge Ltd. have carried out exploration

programs since 1981. The Villalta property is located 12 km east-southeast of the McQuillan claim.

Five 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 (Stevenson, 1945; 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 may be of syngenetic-volcanogenic origin. It is located 3 km south of the McQuillan claim.

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 Island Intrusions diorite located 2 km south of the McQuillan claim. Production of 1,890 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.

The other past producer in the area is the 3-W Mine which consists of gold-bearing quartz veins in Island Intrusions diorite and granodiorite. Production amounts to 116 tons of ore grading 4.0 oz Au/ton, 4.3 oz Ag/ton, 0.23% Cu, and 1.1% Pb. The 3-W Mine is located 13 km south-southwest of the McQuillan claim.

5.0 1985 ASSESSMENT WORK

Between June 18 and 22, 1985, four days were spent on geological mapping, prospecting and rock sampling of road cuts along the Duck 900 logging road and spurs, and the 'McQuillan' road, within the McQuillan claim. The purpose of this work ws to follow up the reconnaissance geologic mapping and rock sampling conducted by MPH Consulting Limited on the McQuillan claim in 1983 (Hawkins and Willoughby) and 1984 (Neale and Hawkins) with more detailed mapping and prospecting to attempt to delineate exploration target-areas that may warrant geophysical and geochemical surveys.

5.1 Lithologic Succession

The McQuillan claim is underlain by a complex, poorly resolved, interlayered and intergradational succession of basaltic pillowed flows; broken and whole pillow breccias, locally hematite-altered; various basaltic volcaniclastic rocks including agglomeratic lapilli tuff, crystal and lithic tuff and cherty tuff; jasper; thick(?) basaltic flows; and, of special note, dacitic(?) agglomeratic lapilli tuff, all of the Sicker Group. The criteria outlined by Muller (1980) to distinguish between the Myra Formation and underlying Nitinat Formation of the Sicker Group, are difficult to apply to this succession. On the parts of the McQuillan claim traversed, the general lack of bedded tuffs suggests the rocks form part of the Nitinat Formation. However, the widespread occurrence of pillowed basaltic flows on the claim are problematic in that "pillow basalts are rare in the Nitinat Formation" according to Muller. The presence of a significant unit of dacitic(?) volcaniclastics on the claim, which are present

in the Myra Formation at Myra Creek, suggests the succession forms part of Myra Formation. Thus, the claim succession is not readily identifiable in terms of Muller's criteria and his distinction between the Myra and Nitinat Formations is not applicable here.

The brief program of geological mapping on the McQuillan claim outlined portions of six major lithologic units. However, the data is insufficient to determine the overall distribution of the units, their direction of dip and therefore, their stratigraphic order of succession. For convenience, the rocks examined can be divided into six main lithologic units on the basis of composition and texture. Five widely scattered measurements on the orientation of layering (pillow bases, bedding and one contact) suggest the succession is upright and may dip shallowly to moderately (20-40°) to the southwest. The succession from west to easterly and southeasterly, can be summarized as follows:

Unit 1 outcrops in the westerly part of the claim, and appears to comprise predominantly pillowed, amygdaloidal basalt. The pillowed basalt contains at least six intervals of basaltic whole to broken and whole pillow breccia up to at least 14 m wide. In one place the pillow breccia grades through an agglomeratic lapilli tuff into a very fine lapilli tuff. Two sub-units of dacitic(?) agglomeratic lapilli tuff, 18 m wide (Station 2), and more than 7 m wide (Station 18), are interlayered with basaltic pillowed flows and pillow breccia. On the Duck 900 road, about 50 m southwest of the northeast edge of Unit 3, a roadcut exposes pyritic, ankerite(?)-altered basalt with weakly anomalous concentrations of silver.

Unit 2 outcrops in the southwest part of the claim, and comprises dacitic(?) agglomeratic lapilli tuff. This unit may be in the order of 150 to 250 m wide, and appears to occur within Unit 1 of pillowed basalt and pillow breccia. As siliceous volcanic rocks including dacite and/or rhyolite are associated with the massive sulphide deposits on Mount Sicker and at Myra Creek, in the Sicker Group, this occurrence of dacite(?) is considered highly significant. Although the dacite(?) itself is apparently not mineralized, it may occur in association with the part of the succession with a higher potential to host massive sulphide deposits.

Unit 3 is partly exposed in the north-central part of the claim, along the Duck 900 road. The unit is at least 60 m wide, and comprises basaltic (agglomeratic) lapilli tuff that appears to grade down-section(?) to the northeast into basaltic lapilli, crystal and lithic tuff with a few agglomerate-sized clasts, and cherty basaltic crystal tuff with a few agglomeratic clasts of basaltic chert.

Unit 4 consists of partly to completely hematite-altered, weakly to locally strongly schistose, basaltic pillow breccia exposed in roadcuts along the McQuillan Creek road in the southeast corner of the claim. Two outcrops of hematitic basalt were located by MPH Consulting Limited in the central part of the claim, in 1984 (Stations 7172 and 7173). These outcrops lie along the northwesterly trend-projection of the hematitic basalts in the southeast corner of the claim. Thus, the hematitic basalt may form a northwesterly trending (345°) unit about 300 m or more wide, located between basaltic lapilli tuffs to the west (Unit 3) and

pillowed basalts (Unit 5) to the east, in the northeast part of the claim, and basaltic flows(?) (Unit 6) to the east, in the southeast corner of the claim.

An outcrop of hematitic jasper was located in 1984 by MPH Consulting Limited and re-sampled as part of this survey, in the southeast corner of the claim. The jasper forms a sub-unit at least 1.7 m wide, near or at the westerly contact of the hematitic basalt unit. Two large boulders located along the McQuillan Creek road (Station 31), 1.9 km to the north of the outcrop of jasper near McQuillan Creek (Station 43), may have weathered from upslope to the west. It is possible that these two occurrences of hematitic jasper form part of the same sub-unit of jasper in proximity to, or within, the hematitic basalt unit (#4). Although chip samples across these two occurrences of jasper did not yield anomalous concentrations of Cu, Zn, Ag or Au, they may be highly significant in terms of exploration for massive sulphide deposits. At the Lynx Mine on Myra Creek, a discontinuous thin bed of jasper occurs at or near the top of the mine sequence. In addition, hematitic basalts (termed purple and green units) form major sub-units within the mine sequence and are closely associated with massive sulphide deposits. Thus, the sub-unit of jasper and the hematitic basalts should be considered as an important lithologic interval along which to focus exploration surveys for massive sulphide deposits.

Unit 5 is partly defined by road cuts along McQuillan Creek road in the northeast and east-central part of the claim. It comprises pillowed basalts that somewhat resemble those of Unit 1, 750 m to the west, but may form part of a unit that occurs

down-section(?) from Unit 1. The pillows of Unit 5 appear to be, in general, indistinct, and therefore larger than those of Unit 1. The relationship between these pillowed basalts and the basaltic flows(?) in the southeast corner of the claim was not resolved.

The pillowed basalt is cut by two or more pyritic chlorite-alteration-shear zones with minor chalcopyrite in a road cut on McQuillan Road (at Station 33). The significance of these pyritic zones, which appear cross-cutting, is unknown. The area may warrant further prospecting and geologic mapping.

Unit 6 is exposed in the extreme southeast corner of the claim. The basalts of this unit are distinct from those of Units 1 and 5 in that they are relatively uniform in texture, non-schistose, contain only 1 or 2% amygdules and are only distinctly pillowed in one place. They appear to comprise thick(?) flows, locally pillowed, and resemble the basaltic flows exposed in the Lizard Lake area to the west and in the Rift Creek area to the south. These basalts also resemble those mapped in the Port Alberni area by Muller as part of his "Sediment-Sill" unit. At Lizard Lake these basalts directly underlie the Buttle Lake Formation, which forms the top of the Sicker Group. If these basaltic flows occur near the top of the Sicker Group, and if the pillowed basalts and volcaniclastics to the west and northwest form a southwest-dipping succession that is older to the east, then the relationship between the basalts of Unit 6 and those of Units 4 and 5 is problematic.

The basaltic flows are cut by a series of feldspar, (hornblende) porphyritic andesite(?) dykes that may be Tertiary(?) in age.

5.2 Mineralization

Anomalous concentrations of gold and copper were discovered in float and outcrop in the McQuillan claim in 1985 (and 1983). The two occurrences of mineralization in outcrop are in pyritic basalts and appear to be fracture-controlled and associated with ankerite(?) alteration in one case, and chloritic alteration in the other. Float occurrences of pyritic basalt, and pyritic diorite(?) with minor chalcopyrite, were analyzed to test for the possibility of gold mineralization.

Although no occurrences of stratiform mineralization were located, two lithologic intervals within the succession of Sicker Group rocks were recognized which may have a greater potential for hosting volcanogenic massive sulphide deposits, and which warrant reconnaissance exploration surveys: 1) the interval of rocks in the southwest part of the claim, encompassing the contact zone between a major unit of dacitic(?) agglomeratic lapilli tuff and underlying(?) pillowed basalt, and 2) the interval of pillowed basalts and hematite-altered, schistose, basaltic pillow breccias, proximate to a major sub-unit of hematitic jasper that appears to trend north to northwesterly across the eastern part of the claim in the McQuillan Creek area.

Below, the four occurrences of mineralization sampled in 1985 are discussed in some detail because they may have more economic significance than is immediately apparent.

A. Pyritic, ankerite(?)-altered, pillowed basalt with anomalous gold and silver

A road cut on Duck 900, in the northwest corner of the McQuillan claim, exposes a pyritic, ankerite(?)-altered basalt within a major unit (#1) of pillowed basalts and associated volcaniclastic rocks (at Station 7). A sample collected by MPH Consulting Limited in 1983, of this rock (#7266) contained 220 ppb Au and 11.2 ppm Ag, significantly anomalous enough to warrant more detailed examination and further sampling in 1985.

At this road cut, about 3 m (exposed) of pillowed, (amygdaloidal), feldspar, (hornblende) porphyritic, feldspar microporphyritic, very, very finely crystalline (to metavitric) basalt grades eastward into very weakly, through weakly to moderately to strongly ankerite(?)-altered basalt. The 2 m or so of strongly ankerite(?)-altered basalt at the east end of the road cut, is very light creamy tan on a fresh surface and weathers medium rusty orange. It contains about 10 to 20% opaque white, completely altered, feldspar grains and a few hexagonal ghosts of completely altered hornblende(?). In addition, the ankerite(?) contains about 0.5 to 1% very fine, disseminated pyrite, and about 0.5 to 1% very fine grained pyrite along thin fractures.

A chip sample across the 2 m wide exposure of pyritic, strongly or completely ankerite(?)-altered basalt yielded an analysis (sample 9869), in ppm, of: 58 Cu, 32 Zn, 2.4 Ag and 10 ppb Au. Chip sampling failed to detect anomalous gold, which the 1983 grab sample from the same outcrop contained (220 ppb). However, the chip sample contains anomalous concentrations of silver (2.4 ppm), as did the 1983 grab sample (11.2 ppm).

A second chip sample was taken immediately to the west of sample 9869, across a 10.5 m width of weakly to moderately (to strongly, locally) ankerite(?)-altered basalt. This sample (9870) yielded an analysis of, in ppm: 78 Cu, 72 Zn, 1.0 Ag and 10 ppb Au. None of these metals appear to occur in anomalous concentrations, with the exception perhaps of silver, which may be weakly anomalous.

To the east of the strongly ankerite(?)-altered basalt (#9869), there is an approximately 3 m wide bank of sandy, rocky (and clay-bearing) soil that appears to be the weathered product of strongly ankerite(?)-altered rock. Grab samples of the soil taken across 3 m (parallel to the road bank) (sample 9871), yielded an analysis of, in ppm: 42 Cu, 52 Zn, 1.2 Ag and 10 ppb Au. Again, sampling failed to detect anomalous gold, but the silver concentration appears weakly anomalous.

The weakly anomalous(?) concentrations of silver and the lack of anomalous gold in chip samples taken of the ankerite(?)-altered basalt at Station 7, do not provide encouragement to conduct further exploration of this zone, however the previous results of up to 220 ppb Au predicate follow-up soil sampling in the area.

B. Chlorite-sericite(?)-pyrite-(hematite-chalcopyrite) alteration zones

A large (17 m wide) roadcut of pillowed, amygdaloidal basalt (of Unit 5) along the 'McQuillan Creek' main road, in the east-central McQuillan claim (Station 33), contains one or two pyritic alteration-fracture zones to 3 cm thick. The best occurrences of the pyritic basalt are in two boulders in the rubble weathered from the roadcut. The roadcut exposes medium grey-green, very strongly

sausseritized, amygdaloidal basalt with two moderately distinct pillows. The basalt is generally very finely crystalline to locally metavitric, locally hornblende(?) porphyritic, and contains about 2-5% (locally 10-12%) calcite-, pink calcite-, and minor chlorite-filled amygdules to 2x6 mm in section.

One of the boulders from the roadcut contains an up to 3 cm thick zone with about 25% very fine grained pyrite, 1 to 3% black, very, very fine to very fine grained chalcocite(??), and a few lenses or pods of massive, very fine grained hematite to 6 mm thick. These occur in a matrix of very strongly chlorite-sericite-altered basalt. A composite of grab samples from this pyritic zone analyzed (sample 9876), in ppm: 38 Cu, 66 Zn, 1.4 Ag and 10 ppb Au. Although the silver may be weakly anomalous, the mineral resembling chalcocite, apparently is hematite.

The second boulder from the roadcut contains a 10x15x15 cm volume of basalt that appears to be a large part (or all?) of a complete pillow. This basalt is completely chlorite-(sericite[?]-leucoxene[?]-)altered, and appears very finely crystalline(?), locally with abundant feldspar(?) phenocrysts. The altered basalt contains about 10-15% (locally to 2-3%) very fine grained pyrite occurring, in general, massively in patches, stringers and a discontinuous series of parallel, very delicate laminations. In addition, the altered basalt contains two irregular fractures with a 0.5 to 2 mm thick filling of chalcopyrite (and minor bornite??), a few percent hematite-stains, and possibly a few patches of massive hematite. Grab samples of this pyritic basalt (#9877) analyzed, in ppm: 1840 Cu, 112 Zn, 1.8 Ag and 10 ppb Au. Thus, the pyritic basalt contains highly anomalous Cu, and weakly

anomalous(?) Zn and Ag. The significance of this mineralization is unknown, which suggests the outcrop warrants further sampling and a more detailed examination.

C. Pyritic basalt cobble

An angular, 5x10x15 cm, cobble of pyritic basalt was found in the road ballast alongside a spur off the 'McQuillan Creek' main road, just west of the bridge across McQuillan Creek, in the southeast part of McQuillan claim. The cobble consists of sub-sub-translucent medium grey-green, very strongly sericite(?)-altered, metavitric or very, very finely crystalline basalt with a few mafic phenocrysts and about 20-25% very, very fine, opaque white, angular, sausseritic(?) dits. This basalt contains about 3 to 20% (or more) very, very fine grained pyrite occurring massively in irregular patches. In addition, the basalt contains about 5% pyrite in fractures.

An analysis of the pyritic, basaltic cobble of float, yielded (sample 9878), in ppm: 12 Cu, 84 Zn, 0.2 Ag and 10 ppb Au. All four metals appear to be at background levels of concentration.

D. Hematitic jasper

1. Float: two very large boulders (1.6 x 1.6 m and 0.8 x 1 x 1.3 m) of hematitic jasper were located in the overburden and in the ditch along the 'McQuillan Creek' main road in the northeast corner of the McQuillan claim (Station 31). These jasper boulders may have been weathered from upslope to the west, from an interval approximately on the northerly trend-projection of the jasper exposed near McQuillan Creek, 1.9 km to the south.

The jasper boulders consist of irregular patches of bright to dull, opaque brick-red jasper with about 10-20% clear grey to white chert(?) occurring interstitially between the jasper patches. The clear grey chert contains very, very fine grained hematite (about 5-8% of the rock, overall) as disseminations in patches and along irregular stringer-like zones. Hematite-filled fractures are common in the jasper.

One boulder contains an irregular pod or lens, 8 cm x 15 cm x 15 cm or more long, with about 10-20% very fine grained, disseminated hematite and 10-20% jasper grains in a matrix of light tan to white, iron-carbonate (which reacts to HCl).

The jasper also contains a few percent discontinuous, white quartz veinlets and very thin, calcite-filled fractures.

A chip-sample across both boulders of jasper yielded an analysis of (sample 9875), in ppm: 10 Cu, 4 Zn, 0.2 Ag and 10 ppb Au, or low background concentrations of these metals.

2. Outcrop: jasper is exposed in a 1.7 m wide by about 15 m long outcrop trending about 155°, on the northeasterly facing slope of a small hill about 30 m west of the 'McQuillan Creek' main road in the southeast corner of the McQuillan claim (Station 43). This hematitic jasper strongly resembles that occurring as large boulders along the 'McQuillan Creek' main road, 1.9 km to the north (described above).

The jasper consists of about 75-90% bright brick-red jasper "grains" and patches with about 10-20% interstitial, clear quartz

patches containing about 5 to 10% (of the total rock) very, very fine grained, steel-grey hematite as disseminations. In addition, the jasper is cut by about 2-5% hematite-filled fractures which are generally very irregular, and up to 1-2 cm thick. In one place, the jasper contains three or four parallel, massive hematite bands 0.5 to 1.5 cm thick, which are broadly folded-appearing and suggest thin to medium bedded(?), interbedded jasper and hematite.

A chip sample across the 1.7 m wide exposure of hematitic jasper, yielded an analysis of (sample 9879), in ppm: 12 Cu, 22 Zn, 0.6 Ag and 10 ppb Au. Similar to the jasper sampled at Station 31 to the north, this jasper contains low background concentrations of Cu, Zn, Ag and Au.

E. Pyritic diorite(?) with minor chalcopyrite

A sub-rounded boulder, 25 cm in diameter, of pyritic diorite(?) was found along a logging road spur off the 'McQuillan Creek' main road, in the southeast corner of the McQuillan claim (Station 51). The boulder consists of very weakly magnetic, medium (green-)grey, opaque white spotted, medium(?) crystalline, feldspar-hornblende diorite(?) with about 5-8% very finely disseminated pyrite, abundant fracture-pyrite and one 2 mm diameter patch of very, very fine grained chalcopyrite apparent.

The pyritic diorite(?) somewhat resembles the Tertiary(?) feldspar porphyritic andesite(?) which occurs in a roadcut beside the pyritic diorite boulder. However, the diorite(?) either lacks apparent metavitric groundmass that characterizes the andesite(?)

or is actually metavitric but microbrecciated yielding an apparent medium crystallinity or possibly is composed predominantly of feldspar phenocrysts with a very small proportion of indistinct metavitric groundmass.

A composite of grab-samples from the pyritic diorite(?) boulder analyzed (sample 9880), in ppm: 420 Cu, 54 Zn, 0.8 Ag and 10 ppb Au. Although the analyses reflect the observed presence of chalcopyrite in the diorite(?), the chalcopyrite, unfortunately, is not accompanied by anomalous gold.

6.0 CONCLUSIONS

1. The McQuillan claim is underlain by rocks of the Upper Paleozoic Sicker Group. The rocks form a complex, interlayered and intergradational succession predominantly(?) of basaltic pillowed flows with thin to thick intervals of broken and whole pillow breccias, locally hematite-altered; a variety of basaltic volcaniclastic rocks including agglomeratic lapilli tuff, crystal and lithic tuff, and cherty tuff; hematitic jasper; thick(?) basaltic flows (of Muller's "Sediment-Sill" unit); and a major unit of dacitic agglomeratic lapilli tuff. The succession is upright and strikes northwesterly to northerly, and may dip, at least in part, shallowly to moderately (20-40°) to the southwest.

2. The brief 1985 exploration program did not delineate any specific mineralized zones, but did locate two lithologic intervals which warrant further exploration due to their similarity to portions of the sequence hosting Westmin Resources Ltd.'s volcanogenic massive sulphide deposits in the Sicker Group at Buttle Lake, 80 km to the northwest. The two intervals are:
   a) the 150 to 250 m wide unit of dacitic agglomeratic lapilli tuff (Unit 2) occurring in the southwestern part of the McQuillan claim, and
   b) the hematitic jasper horizon(?) and the hematitic basaltic rocks immediately overlying and underlying it (Unit 4) in the southeastern part of the claim.

3. In 1983, MPH Consulting Limited grab-sampled a road cut of

pyritic, ankerite(?)-altered basalt in the northwest corner of the McQuillan claim, which analyzed 220 ppb Au and 11.2 ppm Ag (#7266). Chip sampling in 1985, of this interval, failed to detect anomalous concentrations of gold but did detect weakly anomalous silver (#9869--2.4 ppm over 2 m). This "showing" is believed to be of minor significance.

4. A roadcut of pillowed basalt in the east-central part of the McQuillan claim contains one or two narrow fracture(?)-controlled zones of complete chlorite-pyrite-(sericite[?]-leucoxene[?]) alteration and a few chalcopyrite-filled fractures. Grab samples of a portion of a boulder weathered from this road cut contained 1840 ppm Cu, 112 ppm Zn, 1.8 ppm Ag and 10 ppb Au (#9877). The significance of the chalcopyrite mineralization is unknown, but its proximity to the projected positions of the hematitic jasper unit and the hematite-altered, pillowed basalt and basaltic pillow breccias (locally strongly schistose), suggests that more detailed examination and sampling of the roadcut and surrounding area is warranted.

5. In the southeast corner of the McQuillan claim, a boulder of feldspar-hornblende diorite(?), possibly of Tertiary age, contains 5-8% disseminated pyrite and minor disseminated chalcopyrite. Analysis of a grab sample from the boulder yielded 420 ppm Cu, 54 ppm Zn, 0.8 ppm Ag and 10 ppb Au (#9880). The diorite(?) may have weathered from one of a series of dykes or sills of Tertiary(?) feldspar porphyritic andesite(?) that intrude basaltic flows in this part of the claim. In that this intrusive appears intimately related to

gold-bearing vein deposits in the area (Havilah, Golden Eagle, King Solomon and Black Panther deposits), the area of the chalcopyrite-bearing diorite(?) warrants more prospecting.

6. Further exploration, including geological mapping and sampling, prospecting, soil sampling, and VLF-EM and magnetometer surveys is required to assess the economic potential of the McQuillan claim.

7.0 RECOMMENDATIONS

1. It is recommended that Phase I work consisting of detailed geological mapping and sampling with soil sampling on a flagged grid established over target areas identified in this report be carried out on the McQuillan claim.

2. It is recommended that the distribution of the dacitic agglomeratic lapilli tuff be delineated in more detail and that the lithologic intervals immediately above and below the dacite be carefully explored for stratabound massive sulphide mineralization.

3. Similar detailed exploration of the basaltic rocks immediately overlying and underlying the hematitic jasper horizon(?) is recommended due to the geological similarity to Westmin Resources Ltd.'s Buttle Lake mines.

4. It is recommended that the area surrounding sample 9877 (1840 ppm Cu, 112 ppm Zn, 1.8 ppm Ag) be explored in detail as well, as it appears to be on strike with the favourable hematitic jasper horizon.

5. Prospecting and rock sampling in the southeast corner of the claim is recommended in an attempt to locate gold(-copper) bearing veins associated with the Tertiary(?) feldspar porphyritic dykes/sills that occur in that area.

Respectfully submitted
MPH Consulting Limited

T. Neale, B.Sc.

September 16, 1985
Vancouver, B.C.

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 by G. Benvenuto in June 1985, and on my experience in the area.

4. That I own no direct, indirect, or contingent interest in the area, the subject property, or shares or securities of Hollycroft Resource Corporation or associated companies.

T. Neale, B.Sc.

Vancouver, B.C.
September 16, 1985

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APPENDIX I

LIST OF PERSONNEL

AND

STATEMENT OF EXPENDITURES

MPH

LIST OF PERSONNEL AND STATEMENT OF EXPENDITURES

The following expenses have been incurred on the McQuillan claim for the purposes of mineral exploration between the dates of June 18 and June 22, 1985.

Personnel:

G. Benvenuto, Ph.D. Geologist	7.5 days @ $325	$2,437.50		
T. Neale, B.Sc. Geologist	2.5 days @ 325	812.50		
T.G. Hawkins, P.Geol. Consulting Geologist	2 hrs @ 80	160.00		
			$3,410.00	
Expediting Charge	2 days @ 110		220.00	
Truck Rental	5.5 days @ 50		275.00	

Expenditures:

Meals & Accommodation		305.45	
Transportation (gas, ferries)		39.50	
Analyses (Au Ag Cu Zn)	11 @ 9.15	100.65	
(whole rock)	2 @ 20.00	40.00	
Report Costs (drafting, typing, copying)		469.86	
		955.46	
Administration @ 15%		143.32	
			1,098.78
			$5,003.78

APPENDIX II

ROCK SAMPLE DESCRIPTIONS
AND
LITHOGEOCHEMICAL RESULTS

Rock Sample Descriptions and Lithogeochemical Results
McQuillan Claim, June 1985

Sample#	Lithology	Cu (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)
9868	Chert lapilli tuff: about 25%, sub-angular, fine to coarse lapilli (0.4 to 3.2 cm) clasts of opaque medium to light green-grey to seafoam green chert in matrix of feldspar-((hornblende-)) basaltic, fine (to very fine) crystal tuff that may be weakly cherty, and with minor to 2%, very finely disseminated pyrite. Composite of 5 grab samples across an about 80 cm wide interval.	20	86	0.2	10
9869	Very strongly ankerite?-altered basalt: fresh colour is very light creamy tan; about 10-20%, opaque white, altered feldspar? grains to 2x2 mm and few hexagonal ghosts of altered amphibole; about 0.5-1%, very fine, disseminated pyrite and about 0.5-1%, very fine pyrite along fractures. Chip sample across 2 m wide exposure. Grades westward into moderately to weakly to very weakly ankerite?-altered, pillowed, (amygdaloidal), feldspar, (hornblende) porphyritic, feldspar microphyritic basalt, over about 17 m.	58	32	2.4	10
9870	Moderately to weakly (to locally strongly) ankerite?-altered pillowed basalt. Chip sample across 10.5 m; adjoins sample 9869 to west.	78	72	1.0	10
9871	Deeply weathered, ankerite?-altered basalt: sandy, pebbly, and clay soil; "grab" samples across 3 m width, adjoining to east, outcrop sample 9869.	42	52	1.2	10
9872 and 9873 (XRF)	Dacite? agglomeratic lapilli lithic? tuff: Clasts: about 15% fine agglomerate to very fine lapilli sized, near black to very dark grey, white speckled, very strongly to moderately chlorite-altered, (feldspar porphyritic), feldspar microporphyritic, metavitric dacite? with to 5%, very fine,	10	54	0.2	10

Sample#	Lithology	Cu (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)
	opaque white leucoxene? dits and sub-opaque white to pale pastel yellow, strongly sausserite-altered, feldspar phenocrysts. Most abundant clasts are sub-opaque, creamy pastel yellow, very strongly epidote-altered, to sub-translucent medium-light grey-green, weakly sausserite-chlorite-altered variations of (feldspar porphyritic), feldspar micro-porphyritic, metavitric dacite? with 15-30%, opaque white to pastel yellow feldspar micro-phenocrysts (or alteration spots) and commonly 5-10%, very, very fine, opaque white dits. Locally one or two hornblende phenocrysts. Matrix: medium-light green-grey to sub-opaque, medium pastel yellow. Somewhat resembles distinct clasts so may be all tuff-sized clasts.				
9874	Pillowed, amygdaloidal basalt: medium-dark grey-green, very finely crystalline to meta-vitric, moderately epidote-sericite-chlorite-calcite-altered; amygdules generally calcite to calcite + quartz to quartz-filled; minor to 1-2%, very finely disseminated pyrite. Calcite to calcite + epidote filled fractures common.		X.R.F.		
9875	Hematitic jasper boulders: bright to dull, opaque brick-red jasper patches and irregular "grains," with 10-20% grey to white chert or quartz and about 5-8%, very, very fine, hematite as disseminations in grey quartz patches interstitial to jasper patches. One irregular lens?, 8 cm thick and more than 15 cm long, with 10-20%, very fine, dissemi-nated hematite and 10-20% jasper "grains" and matrix of light-tan to white iron-carbonate (strong reaction to HCI). Chip sample across two boulders: one in overburden (1.6 x 1.6 m) and one in road ditch (0.8 x 1 x 1.3 m).	10	4	0.2	10
9876	Pyritic, (hematitic, chalcocitic?), chlorite-sericite fracture-alteration zone to 3 cm thick: about 25%, very fine, pyrite, and 1-3%,	38	66	1.4	10

Sample#	Lithology	Cu (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)
	black, very, very fine to very fine, chalcocite? and a few lenses or pods of massive hematite to 6 mm thick, in very strongly chlorite-sericite-altered basalt. Grab samples from boulder weathered from roadcut of pillowed, amygdaloidal basalt.				
9877	Pyritic, completely chlorite-(sericite?-leucoxene?-)altered, very finely crystalline?, pillowed basalt: approximately 10-15% (locally 2-3%), very fine, pyrite, generally massive in patches, stringers and discontinuous series of parallel, very delicate laminations; few patches of massive hematite?; two irregular fractures with 0.5 to 2 mm thick filling of chalcopyrite (and minor bornite?). Grab samples from boulder weathered from same outcrop of pillowed basalt as #9877. Pyritic basalt in boulder, occupied 10 x 15 x 15 cm.	1840	112	1.8	10
9878	Float: pyritic basalt: sub-sub-translucent medium grey-green, very strongly sericite?-altered, metavitric or very, very finely crystalline basalt with a few mafic phenocrysts and about 20-25%, very, very fine, opaque white, sausseritic? dits, and about 3 to 20% (or more?), irregular, patchy, very, very fine grained pyrite and about 5% fracture-pyrite. Float cobble angular, 5 x 10 x 15 cm, in roadside ballast.	12	84	0.2	10
9879	Hematitic jasper: about 75-90%, bright brick-red jasper as irregular patches and "grains," with 10-20%, interstitial clear quartz containing very, very fine, disseminated, steel-grey hematite (forms approximately 5-10%, overall). Hematite-filled fractures common, generally very irregular, up to 1-2 cm thick. In one place, jasper with co-planar, broadly folded, hematite bands 0.5 to 1.5 cm thick, resembling thin to medium bedding?. Jasper unit at least 1.7 m wide, exposed along trend of about 155° for about	12	22	0.6	10

Sample#	Lithology	Cu (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)
	15 m. Chip sample across 1.7 m wide outcrop. Same sample site as 1984 sample #64106.				
9880	Float of pyritic diorite? or granodiorite? or highly feldspar porphyritic andesite? probably weathered from Tertiary? intrusives: about 5-8%, very fine, disseminated pyrite and abundant (1-3%) fracture-pyrite. Rock is very weakly magnetic, medium (green-)grey, opaque white spotted, medium? crystalline, feldspar + hornblende. One, 2 mm diameter patch of very, very fine, chalcopyrite. Rock somewhat resembles Tertiary? andesite? intrusive in area, but metavitric groundmass not apparent. Composite of chips from boulder, 25 cm in diameter, found beside roadcut of feldspar porphyritic, meta-vitric andesite? intrusive.	420	54	0.8	10

APPENDIX III

CERTIFICATES OF ANALYSIS

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.

PROJECT: V 116
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85164.A
INVOICE#: 5291
DATE ENTERED: JULY 3, 1985
FILE NAME: MPH85164.A
PAGE # : 1

PREFIX	SAMPLE NAME	PPM Cu	PPM Ag	PPM Zn	PPB Au
T	9868	20	0.2	86	10
T	9869	58	2.4	32	10
T	9870	78	1.0	72	10
T	9871	42	1.2	52	10
T	9872	10	0.2	54	10
T	9875	10	0.2	4	10
T	9876	38	1.4	66	10
T	9877	1840	1.8	112	10
T	9878	12	0.2	84	10
T	9879	12	0.6	22	10
T	9880	420	0.8	54	10

RECEIVED JUL 8 1985

CERTIFIED BY : F. Rossbacher

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.

PROJECT: V 166
TYPE OF ANALYSIS: ASSAY

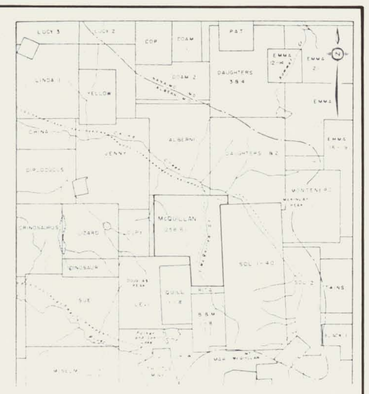
CERTIFICATE#: 85164
INVOICE#: 5283
DATE ENTERED: JUNE 30, 1985
FILE NAME: MPH85164
PAGE # : 1

PREFIX	SAMPLE NAME	% SiO2	% Al2O3	% MgO	% Fe2O3	% CaO	% K2O	% Na2O	% TiO2	% MnO
A	9873	69.0	14.4	1.7	4.2	2.7	2.4	3.5	0.7	0.1
A	9874	46.0	11.8	8.1	9.0	14.8	1.5	1.3	0.5	0.1

SAMPLE NAME	% LOI
9873	2.4
9874	7.0

RECEIVED JUL 8 1985

CERTIFIED BY : J. Rossbach



LEGEND

GEOLOGY (mapping outside claim boundaries by Muller, 1980.)

UPPER PALEOZOIC

SICKER GROUP

1	Pillowed basalt, intervals of basaltic pillow breccia, agglomeratic lapilli tuff (and dacitic ? agglomeratic lapilli tuff).
2	Dacitic ? agglomeratic lapilli tuff
3	Basaltic (agglomeratic) lapilli tuff (and cherty basaltic crystal tuff)
4	Hematitic basalt; pillowed and pillow breccia; jasper
5	Pillowed basalt
6	Basaltic flows
B	Myra Formation – basic to rhyodacitic banded tuff, breccia, and (?) lava; thinly bedded to massive argillite, siltstone, chert.
A	Nitinat Formation – basaltic to andesitic lavas, pillowed, massive, agglomeratic, commonly with large uralite phenocrysts, amygdaloidal.

SYMBOLS

- Claim line with Legal Corner Post
- Logging roads
- 28 Outcrops with station number
- 9876 1985 rock sample location and number
- x 7172 / 64530 1984 rock samples
- Geological contact (position approximate, assumed)
- Foliation; inclined, vertical
- Bedding
- Contact orientation
- Pillow orientation
- Dyke orientation

ABBREVATIONS

A. agglomeratic
L. lapilli
T. tuff
bx. breccia

LITHOGEOCHEMISTRY RESULTS

Sample No.	Cu(ppm)	Zn(ppm)	Ag(ppm)	Au(ppb)
9868	20	86	0·2	10
9869	58	32	2·4	10
9870	78	72	1·0	10
9871	42	52	1·2	10
9872	10	54	0·2	10
9875	10	4	0·2	10
9876	38	66	1·4	10
9877	1840	112	1·8	10
9878	12	84	0·2	10
9879	12	22	0·6	10
9880	420	54	0·8	10
(1984 sample)				
64530	86	66	1·2	50
(1983 sample)				
7266	176	52	1·2	220

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,904

HOLLYCROFT RESOURCE CORPORATION

PROPERTY PLAN, GEOLOGY AND ROCK SAMPLING
McQUILLAN CLAIM
ALBERNI MINING DIVISION

Project No:	V 166	By:	G. B.
Scale:	1 : 5000	Drawn:	J. S.
Drawing No:	4	Date:	SEPT. 1985.

MPH Consulting Limited

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