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GEOLOGICAL REPORT

and

RESULTS OF A SURFACE SAMPLING PROGRAMME

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on

The COPPER, ARDEN, SKY and Mc groups of Mining Claims

in the

ALBERNI MINING DIVISION

VANCOUVER ISLAND

BRITISH COLUMBIA

Latitude 49-00 to 49-10 North

LONGITUDE 124-50 to 125-00 West

NTS 92F/2W

FOR

SYMC RESOURCES Ltd.

by

Robert A. Davey A.C.S.M. P.Eng.

and

N.C.Carter Ph.D P.Eng.

April 1997

TABLE of CONTENTS

	Page #
Summary	1
Introduction	5
Location and Access	7
Mineral Property Claim Group Tenures	9
History	· 10
Regional Geology	13
Property geology and Mineralisation	17
Previous sampling and Drilling Results	24
1996 Field Programme	30
Conclusions	33
Recommendations	35
References	40
Certificate Pages	
Appendix A Diamond Drill Hole Logs	
Appendix B Air Photo Intrepretation report	
Appendix C Assay Logs of 1996 sampling programme	! -
List of Figures	
Figure 1 Location	
Figure 2 Property Location	
Figure 3 Regional Geology	
Figure 4a and 4B Mineral claim groups	•
Figure 5 Sampling Areas 1996 Programme	

Figure 6 Fred David and Red vein Locations Figure 7 Section Line and Sampling area Fred Vein Figure 8 Fred Vein Surface sampling programme Figure 9 Section line David vein Figure 10 David vein assay results Figure 11 Diamond Drill Hole Plan Figure 12 Diamond Drill Cross Sections Figure 13 Beach Road Intrusive Figure 14 MC1 Sampling area

Figure 15 MC Claim Sample Results

Summary

SYMC Resources Ltd. owns several blocks of claims in the Alberni Inlet area of Vancouver Island. These claims spread from a point 3 km from Port Alberni, on the east, to the westerly point 15 km from Port Alberni, a ground distance of 12 km; and extend from the shore line of the inlet inland a distance of 4 km. The claims held by the company are shown on the map attached, and all claims are modified [4 post] claims.

Earlier reports for the company[N.C.Carter 1994 J. Wilson et.al.] were based on a portion of the current land holdings of the company. This report is intended to expand upon these reports and to provide a further analysis of the regional geology, drawing heavily upon these earlier reports and the joint authors' observations during the 1996 field season. In addition to the earlier reports, which were based on the Copper claim group, recent work was based on the premise that additional targets for exploration work were warranted. Further field work was deemed necessary to fully understand the relationship between the geological sequences and the mineralisation of the area. In addition, regional trends which encompass the former producing mineralised areas on Vancouver Island were studied to correlate past producing deposits, stratagraphical controls, and known and

1`

probable mineral deposits related to Tertiary intrusive activity.

The Copper group of claims, on which the majority of the recent work programme was carried out, is underlain by Island Intrusive granitic rocks and their contact with volcanic rocks of the Triassic Karmutsen formation. Intrusive activity caused fracture zones striking east-northeast to north- northeast which are the contacts for quartz-sulphide vein structures. Sampling and mineralogical examination of the vein filling minerals has identified pyrite, chalcopyrite and pyrrhotite, with values in gold, silver and copper.

The dip of these veins is relatively steep relative to the surface topography and therefore the possible vertical extent of these veins and the associated mineralisation may be relatively significant.

Previous sampling over the main structure [called the FRED vein by representatives of SYMC] gave results ranging from 0.218oz/ton gold over 0.76m to 0.952oz/ton over 4.88m and over a strike length of 200m. Diamond drilling during previous work programmes substantiated the existence of the vein structure to depths of up to 40m.

Recent field work correlated earlier results and extended the known mineralised area over a strike length of 800m with grades ranging from 0.19 oz/ton gold over 3.0m to 0.836oz/ton over 1.95m

An intersecting vein structure[which the present owners have designated the David vein] and which was exposed during previous work also yeilded significant values ranging from a high of 0.786oz/ton gold over 1.15 m to a low of 0.1674oz/ton gold over 0.60 m over a strike length of at least 250m.

Additional vein structures reported during earlier work i.e. the RED vein, were not sampled during the recent field field programme but would be a reasonable target for future work.

The eastern area of the claims is within a complex system of contacts between the intrusive rocks and late Triassic limestones which, in northern and central parts of Vancouver Island are host to numerous iron/ copper skarn deposits. The areas detailed during the past field season correlates the information obtained by previous reports and describes the formations as narrow bands of Upper Triassic limestones , striking north-west and underlying Karmutsen andesites on the northeast, and Bonanza volcanics to the southwest. Cutting through these exposures are steeply dipping dioritic to

granodioritic dykes which may have a significant effect on the mineralised patterns.

The narrow bands of limestone have also been sheared; and along these shear zones, and close to the margins of the dykes, are the mineralised areas apparent. Previous descriptions of the mineralised areas indicate these are veins or pods of high grade magnetite, chalcopyrite, and pyrrhotite 1m wide and up to 6m long. The field programme substantiated these findings with samples taken along the mineralised zones having +19 % copper with significant amounts of gold and silver. Previous production from these zones is not completely documented in government reports but significant amounts of direct shipping ore were removed during the first quarter of the century and shipped to smelters in the United States.

It is recommended that exploration work be continued on the claim groups with the emphasis being placed on the delineation of the present known copper/gold deposit on the Copper group of claims. Further surface trenching and work on the structural geology and photo-interpretation is warranted, and, if warranted by results, a drill pattern be considered to delineate the depth potential of the copper/ gold deposit.

The skarn deposits on the MC and possibly the Sky group of claims; should be delineated by

magnetometer surveys or short diamond drill holes at a relatively modest cost. The limestone/intrusive/volcanics contact should accurately mapped to provide additional targets for exploration.

This initial programme is estimated to cost \$ 114,750. A second stage programme at an estimated cost of \$ 885,500 would be predicated on the results of the first phase programme

INTRODUCTION

SYMC RESOURCES Ltd. owns mineral claims in the Alberni Inlet area, south of Port Alberni on Vancouver Island.[figures 4A and 4B] These claims stretch from a point 3 Km from Port Alberni to Macktush Creek on the westerly side of the inlet and from the shore of the inlet inland for distances of up to 4Km from tide water.

Within the claims, which were all staked as Modified Grid {4 post claims], are 11 known mineral occurrences as shown on the former B.C. Ministry of Energy Mines and Petroleum Resources , Mineral Resources Division Minfile maps for NTS map area 092/F.2W

This report, prepared at the request of SYMC RESOURCES Ltd., is a complete revision of a series of reports commissioned by the company at varying periods between 1982 and the present. These reports, by varying authors, were based on previous exploration work carried out on the properties through 1990.

Diamond drilling results incorporated into this report were based on drilling carried out in 1988 by the company under the supervision of F.C.Loring P.Eng and logged by Mr J. Wilson P.Geo. and N.C.Carter PhD P.Eng..

Little activity was carried out on the Macktush area [Copper Claim group] between 1992 and 1996 when the field work described in this report was completed under the direct supervision of the senior author.

Work on the MC claim group was conducted by previous claim holders, and the only records available are those contained in the government assessment reports on open file in Victoria.

The SKY group of claims has undergone limited previous exploration work which include direct shipping of high grade copperiron mineralisation from areas near tidewater in the 1920's.

LOCATION AND ACCESS

All claim groups are contiguous as illustrated on Fig 2 and are located directly south of Port Alberni,on Vancouver Island. Access from Port Alberni is by way of private logging roads.

The closest claim group to Port Alberni is the Sky group of claims, which, at its nearest point is within 3 Km of the city boundary. The claim groups then extend along the Alberni Inlet in a southerly direction for 12 Km, to south of Macktush creek, a distance of 15 km from the city.

Geographically, the claims occupy an area between Latitude 49-00 North and Latitude 49-10 North and Longitude124-50 and Longitude 125-00 with a central co-ordinate of 49-08 North and 124-52 West at the principal mineralised area marginal to Macktush Creek

As part of the field review of the property several claim posts were inspected and verified, and were found to be in accordance with staking methods as detailed in the Mineral Tenure Regulations of the Province of British Columbia. A photographic record of the inspection of the claim posts was also completed. A legal survey of the Macktush Creek area, on the Copper group of claims, completed recently by Simms Associates, Qualicum Beach B.C.', was used to locate the samples obtained during the most recent exploratory programme.

Access to all sections of the extensive claim holdings is possible by highway from Port Alberni and the MacMillan Bloedel, Sproat Lake Division, logging road system either by a "Beach" road which generally follows the shore line along Alberni Inlet, or by another main haul road ["Cous Main"] and then along the Macktush Creek access road. Since completion of previous reports, deactivation of a portion of the private logging road system, under authority of the Provincial Ministry of Forests, has reduced access to the upper elevations of the FRED vein system. Access is presently limited to pedestrian or helicopter travel. A short 4 wheel drive access road to the upper portions of the FRED vein was attempted during the past field season but was stopped due to environmental considerations in the rugged terrain.

All work completed during the past season was along previously constructed logging roads ,all in good repair, but access for future exploration, mapping and other regional work will require considerable foot travel, particularly in view of the considerable regrowth in previously logged areas.

REQUEST OF APRIL 14, 1997

MAP	TENURE	• •		\square		1	CLENT	· · · · · · · · · · · · · · · · · · ·	PERCENTAGE	GOOD TO
NUMBER	NUMBER	¥.D.	CLAIM NAME	TY	PE	UNITS	NUMBER	CLIENT NAME	OWNED	DATE
092F02W	200210	.1	COPPER #100	M	C 4	12	130750	SYMC RESOURCES LIMITED	100.0000	19981031
092F02W	200211	1	COPPER #101	M	C 4	9.	130750	SYMC RESOURCES LIMITED	100.0000	19971031
092F02W	200212	1.	COPPER #102	M	C 4	16	130750	SYMC RESOURCES LIMITED	100.0000	19971031
092F02W	200213	1	COPPER #103	M	C 4	12	130750	SYMC RESOURCES LIMITED	100.0000	19971031
092FD2W	200214	1	COPPER #104	M	C 4	. 20	130750	SYMC RESOURCES LIMITED	100.0000	19971031
092F02W	200215	1	COPPER #105	M	C 4	20	130750	SYMC RESOURCES LIMITED	100.0000	19971031
092F02W	200279	1	COPPER #50	M	C 4	10	130750	SYMC RESOURCES LIMITED	100.0000	19980213
092F02W	322953	: 1	BAY #1	M	C 4	18	130750	SYMC RESOURCES LIMITED	100.0000	19971127
092F02W	323117	1	SKY 3	M	C 4	18	117908	MCMASTER, HERBERT WILLIAM	100.0000	19971217
092F02W	323118	1	SKY 4	M	C 4	18	. 117908	MCMASTER, HERBERT WILLIAM	100.0000	19971218
092F02W	323119	1	SKY 5	M	C 4	12	117908	MCMASTER, HERBERT WILLIAM	100.0000	19971219
092F02W	323120	. 1	SKY 8	M	C 4	15	117908	MCMASTER, HERBERT WILLIAM	100.0000	19971220
092F02W	323121	1	SKY 7	M	<u>C</u>] 4	18	117908	MCMASTER, HERBERT WILLIAM	100.0000	19971221
092F02W	323122	1	SKY 8	M	C 4	15	117908	MCMASTER, HERBERT WILLIAM	100.0000	19971223
092F02W	333951	.	ARDIN CREEK #1	M	<u>C</u> 4	12	117908	MCMASTER, HERBERT WILLIAM	100.0000	19980207
092F02W	341126	1	ARDIN #2	M	<u>C</u> 4	18	117908	MCMASTER, HERBERT WILLIAM	100.0000	19971016
092F02W	341127	1	ARDIN#3	M	<u>C 4</u>	18.	. 117908	MCMASTER, HERBERT WILLIAM	100.0000	19971023
092F02W	342353	1	SKY 9	M	<u>C</u> [4	20	. 117908	MCMASTER, HERBERT WILLIAM	100.0000	19971123
092F02W	342354	1	SKY 10	M	C 4	20	117908	MCMASTER, HERBERT WILLIAM	100.0000	19971203
092F02W	343078	1	MC#1	M	<u>C</u> 4	18	117908	MCMASTER, HERBERT WILLIAM	100.0000	19980124
092F02W	343079	1	MC#2	M	<u>C 4</u>	18	117908	MCMASTER, HERBERT WILLIAM	100.0000	19980124
092F02W	344121.	1	NC #3	M	C 4	15	117908	MCMASTER, HERBERT WILLIAM	100.0000	19980308
092F02W	351775	1	MC#4	M	C 4	15	117908	MCMASTER, HERBERT WILLIAM	100.0000	19971007

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HISTORY

The earliest record of prospecting and mining activity west of Port Alberni and around the Alberni Inlet dates back to the turn of the century when copper-gold vein occurrences near the head of the Inlet were investigated and some 1900 tonnes of material containing copper-silver-gold were mined from the Three Jays skarn deposit south of Nahmint River. Sporadic exploration work, directed to several copper and/or precious metal prospects, has continued to the present.

The current Macktush property includes a number of gold-silvercopper bearing quartz veins. The majority of these have been located by work over the past several years but at least one was explored a number of years ago by several pits and two short adits. Remains of an old cabin [now destroyed] attest to this earlier work and an old claim post with a claim tag characteristic of those in use up to the mid-1940's was observed adjacent to one of the known quartz veins during recent exploration work and reported upon by Carter [1994]. There are no records of this earlier work and references included in the B.C. Ministry of Energy Mines and Petroleum Resources Minfile [92F Alberni June 1990] description of the Macktush property pertain to descriptions of the regional geological setting.

The old workings on one of the vein structures were rediscovered by principals of SYMC RESOURCES Ltd. in April of 1981.

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A number of 2-post mineral claims were located [abandoned and relocated as Modified Grid claims in 1983] and work through 1986 included prospecting, trenching and sampling.

SYMC RESOURCES Ltd. was incorporated in 1987 and this company purchased the mineral claims comprising the Macktush property.[The company has since added to these original claims by staking and purchasing by way of share options to the principals of the company adjacent claim groups including the Mc and Sky claims.]. Financing was arranged for additional work in 1987 and 1988 which included a legal survey, ten diamond drill holes totalling more than 900 metres, mechanical trenching at more than 20 sites and surface sampling at 25 locations.

Preliminary metallurgical test work was carried out in 1988 [Broughton, 1988] as were initial investigations pertaining to possible tailings impoundment areas, [Palmer and Skirmer 1988] and potential mining methods. This work was undertaken in response to the British Columbia Mine Development Steering Committee which had received a preliminary prospectus from SYMC RESOURCES Ltd. earlier that year.

A survey of surface workings and drill hole collars on the main quartz vein structure was supervised by John Wilson P.Geo., in January of 1990 and a compilation of results of exploration work was

completed by Wilson in April of that year. Carter [1990]completed a report on the property and three diamond drill holes were relogged by Wilson in late 1990.

Additional excavator trenching was completed on two of the known quartz vein structures in early 1991.

Work in 1992 and 1993 included 160 metres of road construction, approximately 1500 cubic metres of excavator trenching and 12 hand pits.

The 1996 programme included an extension of the previous trenching, and detailed surface sampling of the Macktush vein structures, regional mapping of on the Sky claim group, added to the SYMC RESOURCES Ltd holdings since 1993, and chip sampling of the skarn type deposit on the MC claims completed the 1996 field programme.

Most of the work carried out on the Macktush property to date has been directed to the south-western part of COPPER #102 claim [Figures 2 and 4A]. The value of exploration work and related technical studies undertaken on the property since the initial location of the mineral claims is estimated to be more than \$500,000.

REGIONAL GEOLOGY AND MINERALIZATION

Vancouver Island makes up the southern most part of the Insular Belt, the westernmost tectonic subdivision of the Canadian Cordillera. The southern Insular belt is dominated by Palaeozoic and Mesozoic volcanic-plutonic complexes and lesser sedimentary rocks which are overlain on the east coast of Vancouver Island by clastic sedimentary rocks of Late Cretaceous age. Tertiary basic volcanic rocks are prevalent in the south Island area and granitic intrusions of similar age are widespread along the west coast of the Island.

Vancouver Island hosts a variety of mineral deposit types which include volcanogenic massive sulphides at Buttle lake and near Duncan which are hosted by late Palaeozoic Sicker group volcanics. The Island Copper deposit near Port Hardy was a porphyry coppermolybdenum deposit with significant by-product gold related to Mesozoic subvolcanic intrusions. Iron copper skarns, hosted by late Triassic limestone marginal to granitic intrusions, are numerous in the central and northern Island areas.

The west coast and central parts of Vancouver Island are noted for gold-bearing vein deposits. Many of these are at least spatially related to Tertiary granitic intrusions and example include the Zeballos camp and deposits in the Kennedy Lake, Alberni Inlet and Mount Washington areas.

The oldest rocks exposed near Alberni Inlet are late Palaeozoic Sicker Group volcanics and sedimentary rocks which underlie the

Northern part of the Cowichan structural uplift [Figure 3]. Three volcanic formations comprise most of the Sicker group in this area [Massey and Friday 1989]. From oldest to youngest these include a basal pillow basalt with minor felsic units, an intermediate fragmental andesite and an upper volcaniclastic-epiclastic sequence. The youngest sequence of the Sicker Group is comprised of cherty sediments, limestones, siltstones and sandstones.

Mesozoic volcanic and sedimentary rocks overlie Sicker Group rocks and include late Triassic Karmutsen formation andesite and basalt pillow lavas, pyroclastics and massive flows, and early Jurassic Bonanza Group fragmental andesites and lesser sedimentary rocks. Where complete Mesozoic sections exist, the Karmutsen Formation and Bonanza Group are separated by Quatsino Formation calcareous and clastic sedimentary rocks.

The Mesozoic sequences underlie much of the area west of the Alberni Inlet [Figure 3] where they are intruded by granodiorites and guartz diorites of the middle Jurassic Island Intrusions.

Youngest layered rocks include late Cretaceous Nanaimo Group clastic sedimentary rocks which underlie the fault bounded Alberni valley . These are intruded by hornblende-feldspar rich porphyry dykes and sills of probably Tertiary[Eocene] age [Massey and Friday 1989].

The dominant north-west structural trend of the Alberni Inlet area is reflected by the Cowichan structural uplift, the elongate nature of Island Intrusion plutons, and the distribution of late

Cretaceous sediments in the north-west trending Alberni valley. Regional north-west trending thrust faults mark the boundaries between Sicker Group and younger rocks east of Alberni Inlet [Massey and Friday 1989].

Various styles of mineralisation are recognised in the Alberni Inlet area [Muller and Carson 1969: Massey and Friday 1989]. These include volcanogenic massive sulphides of the Sicker Group, porphyry copper and/or molybdenum mineralisation associated with Island intrusions granitic rocks and iron-copper skarn deposits and occurrences in Mesozoic sedimentary and volcanic rocks, some of which have yielded limited production in the past. The best example of one of these is the Three Jays prospect on the west side of Alberni Inlet. According to Wahl[1980], much of the copper mineralisation at this prospect may be related to shear zones.

Considerable work has been done, in recent years investigating similar styles of mineralisation at the head of Cous Creek. Here, discontinuous massive sulphide lenses and pods containing copper, silver and gold values are developed in Karmutsen andesite flows near their contact with Island Intrusions granitic rocks and adjacent to felsic dykes of probable Tertiary age [Sookochoff 1986: Laanela 1987].

Other known deposit types west of Alberni Inlet include a number of copper occurrences in fracture zones in Karmutsen Formation volcanic rocks, examples of which include one prospect near Alberni Inlet 5Km north of the Macktush property and several occurrences

immediately south of Macktush Creek. The latter prospect features pyrrhotite, pyrite and chalcopryite in shear zones and in lenses in Karmutsen volcanics from which some silver values have been reported [Stewart 1983].

The most common mineral deposits in the Alberni Inlet area are gold bearing quartz-sulphide veins and fissure zones. These are widespread in the Franklin River-China Creek area east of Alberni Inlet where they are spatially and possibly genetically related to a North trending belt of Tertiary feldspar porphyry intrusions [Carson 1969].

Gold bearing quartz-sulphide veins also occur in shear zones in Karmutsen Formation basalt west of Alberni Inlet. Examples include the Ferguson prospect south of Two Rivers Arm on Sproat Lake and the Raven and Dauntless prospects due west of Port Alberni and 7-10 Km north of the Macktush Property. These prospects are now included in the present claim grouping and were investigated during this work programme. Gold values at these prospects is associated with quartz veins containing chalcopyrite, pyrite and pyrrhotite [LeRiche and Hopkins.1988].

PROPERTY GEOLOGY AND MINERALISATION

[1] MACKTUSH MINERALISED AREA

The Macktush area of the claim group is underlain by late Triassic Karmutsen Formation basaltic pillow lavas and andesites which are in contact with granodiorites and quartz diorites of the Middle Jurassic Island Intrusions.

As indicated in Figure 3 these granitic rocks, which underlie much of this area of the claim group, are part of an elongate pluton which extends south-easterly from Sproat Lake through the Copper claims and across Alberni Inlet.

According to mapping carried out in the area by Sutherland Brown and others [1986], the contact between the Karmutsen volcanics and Island Intrusions, extends in a south-easterly direction through this group of claims just below the height of land; and this was confirmed by the previous work programme on the property.

Tholeitic pillow lavas were observed as the dominant rock type west of the contact, while andesitic varieties underlie the deep valley along Macktush creek.

Granitic rocks of the Island Intrusions, observed during former exploration and the most recent work programme in

the central area of the Copper group of claims, include medium to coarse grained grey quartz diorites and granodiorites. Some potassium feldspar stringers programme [15cm wide aplite dykes]have been noted.

The contact between the granitic and volcanic rocks in this portion of the claim group is irregular; and numerous inclusions of Karmutsen pyroxene porphyry flows and bleached andesites have been noted within granodiorites.

Known mineralisation in the westerly portion of the claim group includes a small skarn zone in Karmutsen volcanics, and porphyry style mineralisation in several localities. This later style mineralisation included molybdenite in quartz vilest in the Island intrusions, exposed along the logging road cuts and adjacent to Alberni Inlet, and disseminated chalcopyrite in K-feldspar altered diorites.

The most significant mineralisation found to date in this portion of the claim group is however a number of gold-bearing quartz-sulphide veins, on which most exploration work has taken place, and which were the subject of several reports by N.C. Carter Ph D. P.Eng. and others. These are close to the contact between the Karmutsen volcanics and the Island Intrusions. Previous work determined the strike of these veins as being north-easterly and dipping moderately to steeply Southeast. The strike direction has been reported as normal to the overall trend of the Island Intrusions contact

which parallels the regional trend and in this particular area the distribution of veins is equally divided between volcanic and granitic host rocks.

It has been postulated that the deposits found on this portion of the claim group are of epithermal origin, which, as described by Panteleyev [1985] were formed by hot ascending waters, and have the following characteristics;

"Formed near the surface to a maximum depth of 1000m Veins are the most common ore host, and they tend to branch or flare upwards into wedge or cone like feature. Deposits form in extensional tectonic settings in areas with well-developed tension fracture systems and normal faults. Mineralisation occurs in volcanic terranes with well

differentiated subaerial pyroclastic rocks, and numerous small volcanic intrusions.

Ore and associated minerals are deposited dominantly as open space fillings with banded, crustiform, vuggy, drusy colloform and cockscomb textures.

Gangue minerals are mainly quartz and calcite with lesser florite barite and pyrite.

Hydrothermal alteration is pronounced . Zones of Silicification can be flanked by zones of illite-sericite and clay alteration, all occurring within zones of propylitic alteration."

Previous work by Carter and Wilson has shown that the mapped vein widths on the Copper group of claims range from 0.30m to several metres with an overall average of about 1.3m. Vein contacts are commonly sheared with 7-30cm wide gouge zones developed in wallrocks along both the hanging and footwall. Additional quartz stringers were observed as marginal to the main vein structures.

Most vein structures display multiple stages of quartz veining and colloform banding is common as are drusy cavities.

Sulphide mineralisation within the vein includes fine to medium grained pyrite, pyrryhotite, and chalcopyrite.

Persistent north-east structures appear to control the distribution of quartz veins which strike in two principal directions. These structural directions, are east-north-east and north-northeast, and are reflected by the local drainage and prominent draws.

Two vein structures which have been the focus of previous work are the RED and FRED veins.

The RED vein, on which no work was carried out in the present programme, is described [Carter 1994] as a north-northeast trending structure extending several hundred metres down a draw along which parallel quartz structures at the south-western limits were exposed by previous excavator trenching.

PROPERTY FILE

21

The work programme of this report was directed to the Fred vein and parallel vein structures as shown in Figures 5, 6, 7and8 and this vein is typical of the east- north-east trending structures with the footwall exposed in the nearby drainage.

[2] MC and SKY GROUP OF CLAIMS MINERALISED AREAS

In contrast to the Macktush group of claims, regional mapping of the SKY and MC group of claim areas to date has only partially defined the contacts between the various units. Detailed field work is needed to accurately determine this.

Field work by other geologists [Muller and Carson 1969] indicates that the large4r skarn deposits on Vancouver Island are at or near contacts between Triassic Quatsino Limestone and Jurassic intrusions and that the host rocks for the deposits may be either the limestone, volcanics of the Karmutsen formation and the Bonanza group, or the intrusive rocks which intrude the earlier units. Magnetite and chalcopyrite, as high grade pods or lenses along fault and deformation zones, are the principal minerals of interest in these skarn deposits.

The recent programme delineated several strong shear zones, which when coupled with the results of the recent aerial Photogrammetric survey define additional targets for detailed work and surface magnetometer surveys. In addition to the shear zones and intrusions cutting the volcanics, pyrite haloes exposed in stream beds were sampled to determine the proximity of the intrusion and area of influence of potential mineralising fluids and are reported. later in this report.

Historically, these skarn deposits were the scene of a great deal of mining activity and reports of some 9 different exposures are on open file with the Mineral Resource division of the Ministry of Energy, Mines and Petroleum Resources Minfile [now renamed the Ministry of Employment and Investment, Minerals and Energy Division]

These reports all indicate that lenses of relatively high grade chalcopyrite and pyrite with varying percentages of gold were shipped to Tacoma, Washington in the early years of the century from adits driven into the hillside for distances up to 30 metres. All these early exploration and production tonnages were obtained by excavation directly on veins, shear zones, or fault zones, and exploited only the small high grade pods without delineating additional areas. All government reports are consistent in describing the upper Triassic Karmutsen formation host rocks which are generally andesite. Several types of mineralization occur as follows:-

[1]Within the Karmutsen volcanics irregular alteration to skarn and irregular mineralisation consisting of chalcopyrite, lesser bornite, and superficial malachite and azurate.

[2]Pockets and disseminations of chalcopyrite and bornite in skarn and limestone in areas where the limestone is intruded by granitic rocks.

[3]Massive magnetite containing bands of pyrrhotite with some chalcopyrite.

[4]Commonly veins pods or lenses of massive sulphide up to 1m wide and at least 6 m long containing pyrrhotite and pyrite and lesser amounts of chalcopyrite and bornite.

PREVIOUS SAMPLING AND DRILLING RESULTS

Surface sampling on the Copper group of claims has been carried out since 1981 when the initial discovery was staked by SYMC RESOURCES Ltd. and related parties, and has been the subject of several previous reports. The initial sampling was conducted by representatives of SYMC Resources Ltd, Provincial Government geologists, and N.C.Carter Ph.D. P.Eng. Samples taken by representatives of SYMC Resources Ltd were described by F.C.Loring P.Eng. [N.C.Carter 1994] as being representative chip samples across the stated widths.

Previous work exposed both the RED vein and the FRED vein systems and a summary of this sampling is included in this report to clarify the most recent programme.

Initially the RED vein was exposed by excavator trenching which indicated sheared vein material in granitic rocks striking N40E and dipping steeply to the east. The initial exposure was a series of narrow quartz veins over a width of 6 metres which was traced by further excavator trenching a distance of 350 metres down slope, some 130 m vertically below the original sampling areas. Additional trenching 60m east of the original zone exposed a parallel structure

in the hanging wall of the main structure. All chip samples recorded from this zone yielded low gold, silver, and copper values.

More significant is the work carried out on the FRED vein. Two short adits and three pits expose widths of 0.46m to 4.88m with grades ranging from 0.173 oz. to 0.952 oz. gold/ton, 0.12 oz. to 2.21 oz. silver/ton and 0.01% to 1.34%copper. These locations are shown on the accompanying figures 5 and 6

This sampling demonstrated that two parallel quartz veins, 0.6m apart, were present, both of which contained pyrite/chalcopyrite within an intensely sheared zone in quartz diorites. Numerous quartz stringers adjacent to these veins were recorded both in the vicinity of the lower adit and above this adit.

These programmes established the presence of north-north-west trending quartz veins developed in the apparent hanging wall of the FRED vein, and a similar north-north-east steeply dipping vein in the footwall of the structure which is 2m wide and contains disseminated pyrite, pyrrhotite, chalcopyrite and possibly tetrahedrite.

Prior to the surface sampling conducted between 1990 and 1994, diamond drilling had been undertaken in 1987 and 1988. Due to problems with the drilling programme including recoveries

and sampling, the documentation from .Carter's1994 report is reproduced in its entirety

" Diamond Drilling"

10 BQ size diamond drill holes were completed on the Macktush property in 1987 and 1988. Most of the core recovered was stored on the property. Sections of three 1987 holes, drilled on the FRED vein [DDH 87-01, -03 and -08], were split and sampled under the direction of F.C. Loring P.Eng.

Core boxes containing split core sections from holes 87-01 and 87-03 and most of hole 88-05 [not logged or sampled until June 1990] were stored in Port Alberni. Core from the other six holes drilled was tipped while unattended at the field site before any logging or sampling was done and unfortunately, is of little or no value in its present condition. These six holes included two shallow inclined holes on the RED vein, two inclined holes near the south-west end of the large trench and two drilled to test parts of the FRED vein. [H. MacMaster SYMC RESOURCES Ltd personal communication.]

Diamond drill cores from four inclined holes, totalling 321 metres and drilled to test the FRED vein, are in reasonably good order. These were drilled at -45 degrees along 330 degree azimuths and tested the FRED vein along its exposed strike length to vertical depths of between 20 and 40 metres. Drill hole locations are shown in figure 11 and sections, after those originally prepared by John

Wilson P.Geo. , are illustrated on figure 12 . Surveyed locations of the holes are as follows:-

Hole number	North East	Elevation m
DDH 87-01	2679.5	1165.5 683.0
DDH 87-03	2784.4	1253.4 597.8
DDH 88-05	2770.8	1238.5 607.8
DDH 87-08	2725.0	1188.5 644.0

Results of the core sampling for the three 1987 holes were provided by SYMC RESOURCES Ltd. The writer [N.C.Carter Ph D. P.Eng.] logged and sampled DDH88-05 and the drill log and analytical data for this hole, plus other analytical data for the other three holes as provided by SYMC RESOURCES Ltd. and are contained in Appendix 1

Because of the uncertainties in establishing precise sample intervals for holes 87-01, -03,and -08, Mr John Wilson under took the re-logging of these holes in December 1990. Further information concerning the sample intervals was obtained from Mr F. C. Loring, P.Eng. Mr Wilson's diamond drill core logging report, including drill logs for the aforementioned three holes is contained in Appendix1

The FRED quartz vein structure was intersected in the four holes drilled and results confirmed a southerly dip of 60 and 80 degrees. Core lengths of vein material ranged from 1.14m in the

most westerly hole [DDH 87-01] to 3.81 m in DDH 87-03 near the known eastern limits of the structure.

Geological relationships noted by the writer in DDH 88-05 are believed to be representative of the FRED vein and they generally confirm relationships noted in surface exposures. The hole was collared in generally fresh, medium grained, grey quartz diorite locally cut by 0.5-5m wide, post mineral basic dykes with chilled margins. Some 15 m above the quartz vein intersection, the quartz diorite features an increasing number of guartz-carbonate -pyrite stringers plus an increasing silicification and argillic-carbonate alteration. Disseminated pyrite and pyrrohitite is also a feature of more intensely altered zones and inclusions of Karmutsen volcanic rocks are evident. A 2 metre length of guartz vein, intersected between 47.5 and 49.5 metres, exhibits multiple stages of veining, drusy cavities and disseminated pyrite, pyrrofillite and chalcopyrite. An 8 m long section of variably altered quartz diorite, 0.5 m of Karmutsen volcanic inclusions and a basic dike, follows the quartz vein intersection within the hole terminating at 60m in relatively unaltered quartz diorite. Sampling of the drill cores from the four holes drilled on the FRED vein yielded the following results:-

Hole #	Interval[m] Lengt	h[m]	Au[oz/t	on Ag[oz/to	on Cu[S	\$]
DDH87-01	109.58-110.72	1.14	(0.174	0.06	0.03
DDH87-03	33.50-34.29 0.79		0.112	0.48	0.80	
	36.59-40.39 3.81		1.290	5.04	0.95	
DDH87-08	71.63-72.88 1.25		0.290	0.05	0.03	
DDH88-05	47.22-48.80 1.58		0.006	0.09	0.02	
[219ppb] [3.0ppm][190ppm]						

Bulk Sampling

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In addition to surface sampling and diamond drilling which yielded limited results, a bulk sampling programme of the FRED vein in 1988 consisted of four 6 to 8 kg samples which were submitted to Coastech Research Inc for preliminary metallurgical testing. Average head grades of 0.126 oz/ton gold and 0.290z/ton silver from a composite sample were subjected to flotation and gravity concentration and cyanidation test procedures. Results from this preliminary work indicated that good recoveries could be obtained for gold , silver and copper by initial gravity separation to recover the coarse gold and by a secondary froth flotation to produce a sulphide concentrate containing copper and precious metals.

1996 FIELD PROGRAMME

The scope of the September to December 1996 field programme was two fold in scope and was directed to:-

[1] The area described as the Macktush [Copper]group of claims where extensions to the previously known mineralised structures were probable in addition to parallel zones hosting potential economic mineralisation.

[2] The claim group to the north of the previously investigated area and now held by SYMC Resources Ltd where prospects for high grade skarn type mineralization were evident and which, when combined with the mineralisation on the Macktush claims, might provide sufficient feed for a possible mining operation.

The work was carried out under the direct supervision of the senior author who personally collected the samples for subsequent analysis.

Trenching was conducted on the Macktush [Copper group] of claims by a Port Alberni company using a hydraulic excavator. The trenches, as far as practicable, were cut at right angles to the presumed strike of the veins and were taken down through any overburden or gossan capping into clean unoxidised rock where possible.

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Chip samples were collected from fresh outcrop and the sample locations marked for reference by paint. Upon completion of sampling across each structure, the excavated area was surveyed using a tape and compass from existing survey pins. Due to environmental restraints, the trenches were backfilled and the surface returned, as far as practicable, to its original condition, as stipulated by the acceptance of the notice of work filed with the Ministry of Employment and Investment, Minerals and Energy Branch.

In addition to the bedrock sampling, geological mapping of the exposed vein structure was completed and the results correlated with the assay values obtained. It is worthy of note that extensive gouge zones were observed on both the foot and hanging wall of the vein structures and that these clay rich zones were also mineralised.

Regional sampling was also carried out on granitic rock types exposed along the main access road from Port Alberni along Alberni Inlet.

These intrusive rocks are cut by chear zones containing abundant pyrite and chlories. Only background metal values were obtained from this sampling.

Bryce Whittles Ph D. was commissioned to carry out a photogrammetric study of the area.

Initial communication with Dr Whittles, while field conditions were still suitable, suggested additional areas for sampling along the Alberni Inlet access road. Here apparent regional stress zones, similar to those detailed in the Macktush mineralised area, were noted. This expanded sampling programme was carried out on the Arden group, which encompasses the Arden creek watershed.

The MC group of claims straddle contacts between the limestones, Karmutsen and Bonanza volcanics, and the granitic intrusions and these claims are considered to have good potential for copper/iron skarns. Mapping of the claim group indicates that favourable contacts are irregular, a feature not documented in previous reports. Mineralisation was channel sampled across widths of up to 1m. High copper values were obtained but lengths of the mineralised

exposures were limited and previous descriptions of pod like structures appears to be quite accurate. The sample results and field observations are noted on Figure 14 and 15.

CONCLUSIONS

Field work completed during 1996 confirmed earlier observations that the Macktush area of the Copper group of claims has potential for economic mineralisation. Recent work has extended the FRED vein structure over a surface length of 800 m with widths varying from 0.60m to 3.0 m and averaging 1.85 m. Vein continuity has been demonstrated above and below the area previously drilled and the depth potential can be tested by additional drilling. The two parallel vein structures noted may, in fact, be one structure featuring several stages of vein emplacement in the volcanic wall rocks.

Quartz veins at an oblique angle to the FRED vein are indicative of a complex structural setting that has a degree of predictability. Air photo interpretation has delineated additional structures which confirm field observations.

These structures which appear to be hidden by a capping of the volcanics in the Southwestern portion of the claim groups would be an excellent target for further exploration after the immediate stage 1 and stage 2 programmes are complete. Regional
mapping and sampling of the Arden claim group is also warranted based on work by Dr Whittles.

Survey control, by way of GPS or convential surveying, is recommended to produce a composite map to tie in the results of field work.

Copper/iron skarns should be investigated further with the emphasis being placed on the precise determination of the contacts between volcanics and intrusive rocks. Geological mapping should provide a better assessment of structural control which might identify additional areas for sampling and limited diamond drilling. The topography in the area of skarn exposures suggests that short holes be drilled into the sidehill may be cost effective. A Magnetometer survey of the known skarn area, normally high in magnetite, would also prove to be cost effective.

Based on the results of the field work completed in 1996 and on data available in previous reports, it is felt that additional work on all portions of the claims is warranted as detailed in the succeeding section.

RECOMMENDATIONS

The diversity of mineralization identified to date indicates that the prioritising of field work the utmost importance. The writers recommend that future programmes programmes be carried out in stages with each stage being contingent upon the results obtained from the earlier work.

Existing survey control in the mineralised areas is not adequate and it will be necessary to prepare a 1:5000 scale topographic map. This can be completed utilising existing topographic maps, colour air photographs, and ground control. Detailed 1:1000 maps should also be prepared prior to field work to provide more detail in the area of the known vein systems and skarn zones.

These topographic maps will facilitate detailed geological mapping , surface sampling and trenching of the following areas.

[1] Extension of the David and parallel vein systems

[2] Further trenching on the Fred vein at its upper extremity to penetrate the gossan capping of the structure.

[3] Detailed cross trenching on fracture planes indicated by the air photo survey to identify additional structures. This work should be mainly concentrated on the Arden group of claims where access is readily available through a disused logging road system.

[4] Field mapping of the MC and Sky group of claims to follow up and delineate the limestone/volcanics/granitic rock contacts.

Results obtained from this first phase of the work could lead, to diamond drill testing of the Fred and David vein structures.

Phase 2

The original diamond drill holes on the Fred vein should be resurveyed and an additional drill hole from each of the four existing set-ups drilled at -60 degrees to intersect the vein at a greater depths.

Additional widely spaced holes at -30, -45 and -60 degrees should be drilled to establish continuity of the vein. Short holes are recommended for Arden claims to establish the structural continuity of mineralization from surface sampling in this area if warranted from the results of phase 1.

In conjunction with this work, a regional geochemical sampling programme should undertaken to complement the surface geological mapping and to define other areas of potential interest.

Phase 2 work on the MC and Sky claims could include, if warranted, detailed magnetometer and geochemical surveys. This could be followed up by a shorthole, closely spaced, diamond drilling programme.

Further work on either group of claims would be contingent on the results of the first two phases of work.

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COST ESTIMATE

Phase 1

Topographic mapping/G.P.S. mapping	\$15000
Geological mapping	\$ 8500
Road clearing and grubbing,	\$ 7500
Excavator trenching and pitting	
150 hrs @ \$125.00/hr	\$18750
Hand sampling and collection[rock and	
geochemical]	\$10000
Sample analysis	\$20000
Engineering, supervision and reporting	\$40000

Contingencies @15%

\$15000

Total Phase 1

\$114750

Ph	а	se	2
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Diamond Drilling 3500m at \$150/m[all inclusive]	\$535000
Diamond Drilling 1000m at \$100/m[all inclusive]	\$100000
Geochemical sampling	\$ 10000
Magnetometer survey	\$ 5000
Sample analysis	\$ 20000
Geological mapping	\$ 35000
Engineering Supervision and Reports	\$ 75000
Contingency @ 15%	\$115000

TOTAL Phase 2

\$885000

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APPENDIX A

DIAMOND DRILL HOLE LOGS

SYMC RESOURCES LTD

DRILL PROGRAMME

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APPENDIX B

REPORT ON THE FINDINGS OF AN

AIR PHOTO INTERPRETATION

OF THE

SYMC CLAIM GROUP

ALBERNI AREA

VANCOUVER ISLAND

Dr. A.B.L.Whittles, P.Eng.

March, 1997

<u>.</u>

B1. INTRODUCTION

This Appendix is a much abbreviated version of an air photo interpretation report (Whittles, 1997b) that is available from SYMC Resources Ltd (called the "Main SYMC Report"). There is also a "SYMC Summary Report" (Whittles, 1997a) that was prepared for SYMC which is more comprehensive than this Appendix, but which itself is only a summary of the findings of the Main SYMC Report. The purpose of this Appendix is to provide a brief outline of main findings of the air photo study, without the detailed analysis and supporting evidence provided in the Main SYMC Report, or in the SYMC Summary Report.

The location of the SYMC Claim Group, claim ownership, etc. is discussed in the main body of this report (Davey and Carter, 1997), and the areas covered by the air photo studies are outlined on Figure B1. Two separate groups of air photos were used: AP1 Study Area, using high altitude air photos (1:80,000); and, AP2 Study Area (1:17,900). Detailed information (air photo numbers, etc.) is available in the Main SYMC Report.

The air photos were examined using mirror stereoviewers, the lineaments transferred by a GTCO digitizer to a TurboCAD computer diagram, and the results analyzed using the Rose diagrams produced by the SpheriStat computer program. Whittles (1997b) gives a complete discussion of air photo techniques, the various file formats produced, and the limitations particularly of the SpheriStat program (a new product).

The SpheriStat program allows a rapid testing of the lineaments, giving a good level of confidence that identification of the lineaments as: faults of various kinds, joints, or just random geomorphologically produced features, is valid. The identification of the lineaments was also tested against the findings of a qualitative analysis of the air magnetic map of the region, a detailed study of the geological reports of the area (Muller and Carson, 1969; Muller, 1977; Southerland Brown et al, 1986; Massey, 1995), as well as against a background of the plate tectonics of Vancouver Island that are known from the lithoprobe studies (Hyndman et al, 1990).

B2. STRUCTURAL GEOLOGICAL SETTING OF THE SYMC CLAIM AREA

A summary of the regional geology and mineralization, is given earlier in this report (Davey and Carter, 1997). The geological map of Massey (1995), being the most recent and complete study of the Alberni area, was analyzed to provide the geological controls for the air photo interpretation. All the faults on the Massey map were measured and plotted on Rose diagrams. Several distinctive trends were observed, attributable to thrust- composite and strike slip faults. These were compared to the lineaments of the air photo analysis, and used to interpret the structural geology of the SYMC property, and its relationship to the gold mineralization found on that property. Refer to the SYMC Summary Report for an outline of these results or to the Main SYMC Report for the details.



Regional Thrust-Composite Faults

Certain of the Massey faults are identified as thrust faults. There is some disagreement amongst geologists as to the exact nature of some of these. Although the concept of thrust faults is very strongly supported by the extensive tectonic studies, most recent published regional geology, and is a concept the present writer accepts, the faults are probably listric, may become almost vertical at the surface in certain locations on Vancouver Island, and in addition to vertical movement may have extensive strike slip movements. The counter motions of North American and Juan De Fuca tectonic plates make both thrust faulting and compressive strike slip faulting most likely. Consequently, the present writer prefers to label these as thrust-composite faults

This type of fault is essentially restricted to a band of directions. The mean azimuth is 145 (or 325) degrees. The thrust-composite faults are inferred to be restricted mainly to the 303 to 343 directional zone. There is a fine structure evident, and the possible significant of this is discussed in the full report (Whittles, 1997a). The presence of this fine structure does not alter the conclusions presented in this Appendix.

Other Regional Faults

Three other prominent fault directions were found. The possible significance of these features will be discussed in the following section.

B3. AIR PHOTO INTERPRETATION OF THE SYMC PROPERTY

The air photo study covers an area perhaps 1/10 of the size of the Massey map area, was conducted entirely independently of the Massey map, and used air photo lineaments rather than ground observations; yet there are many common features on both sets of maps. This is what one would expect if both approaches were examining similar underlying structures. These structural patterns are not just random (the "shattered" glass analogy); consequently, it is important to try to analyze them, provide an exploration model that uses this analysis, and apply this model to expand the potentials of the property.

Whittles (1997b) discusses the differences of "shattered glass" or random patterns and those found in the air photo study. Random values of direction and length were generated from a random number table, and tested. The Rose diagram plot can recognize a random number (or uniform) plot even with small numbers of lineaments.

The following figures outline the findings of the these air photo studies. The full report (Whittles, 1997b) should be referred to for the detailed analysis.

Figure B2: Map Plot of All the High Altitude Air Photo (HAP) Lineaments

This is a TurboCAD map showing all the lineaments of AP1 Study Area (Figure B1). It is easy to consider that this is just a random distribution of lines, but the following analysis shows that once we filter the "noise" from the map, a definite underlying structure emerges.



Figure B2: Composite of All Air Photo Lineaments

Figure B3: Rose Diagram of All Air Photo Lineaments

Sample Parameters

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Number of Data Points in Set	293
Number of Data Points Counted	293
Type of Data	Lines (Trend)
Range of Plunge Angles	Ò° - 90°
Class interval	10°
Class Alignment	Start at 0°N
Kurtosis, k, of Smoothing Function	206
Half-width of Smoothing Function	±4.7°
Weighted Calculation	

Frequency Statistics

Mode (Peak)	13.4%
Range of Mode	0° - 10°
Smooth Peak	10.4%
Azimuth of Smooth Peak	5.0°
Expected Value, E	5.6%
Standard Deviation	2.0%
95% Confidence Levels	<1.6% & >9.5%

The distribution has a preferred trend.

Resultant Vector

Magnitude, R	23.3%
Azimuth	154.2°
Critical Value of R	10.3%
The distribution has a preferred trend.	
Von Mises Parameter, K	_ 0.479
Standard Error of Mean	±10.0°
95% Confidence Interval	±19.6°

Figure B3: All HAP Air Photo Lineaments: Rose Diagram

This is a Rose diagram plot of all the lineaments on the AP1 Study Area. Even though it undoubtedly contains many random features (e.g. note the solid inner circle), it is not a random plot. It has a preferred direction of 335, which closely compares to that of the Massey map (333). Even though the latter map is almost an order of magnitude larger, the two mean directions agree within 2 degrees.

Figure B4: Map Plot of HAP Major Lineaments

This TurboCAD map has the minor lineaments removed, and while still complex, is beginning to show some definite structural trends. Rose diagrams of these lineaments agreed closely with the results of the regional mapping (Massey, 1995); even though the two scales involved differ by nearly an order of magnitude, the basic structural patterns are very similar. As well, certain fault set populations agree to within about 1 degree. There appear to be some likely thrust-composite faults, other fault sets are comparable between the two scales but some new fault set populations have emerged at this (air photo) level of scale.

Figure B5: Map Plot of Inferred Thrust-Composite Faults

As discussed in detail in the Whittles (1997b) report, there are five main parameters used to decide if an air photo lineament is likely to be a fault: direction, spatial relationships with other lineaments, topographical features, hydrological features, and geological aspects. These parameters were used in the present interpretation. Refer to Whittles (1984, Table 2, p.42), Whittles (1990, Table 4, p.18), and Whittles (1997b) for examples.

Figure B6: Sets A/C, B, and X Strike Slip Faults

These are shown on the map and are largely confined to the exposed and inferred igneous intrusive rocks (the Jurassic granodiorites). An analysis of these features (Whittles, 1997b) and ground observations, indicates these are the most active strike slip faults on the air photo mapped area, and are the sites of gold enriched mineralization.

Figure B7: Low Altitude Air Photo (LAP) Study Area

As noted earlier, the smaller area AP2 on Figure B1, was examined at a scale of 1:17,900. Also shown on this figure are the locations of the known mineralization (shown as small stars; labeled Fred, Sy, etc.). The lineaments are the fault populations Sets B and X, discussed above. The smaller dashed lines are minor features in the directions of the major lineaments, and therefore possible parallel faulting, or overburden masked major lineaments. The one thrust-composite fault (in the northeast corner, along Arden Creek) is paired with a similar one to the immediate south of this area, along Macktush Creek (see Figure B7). Together, the shearing action associated with the strike slip part of their composite nature - a likely left lateral movement - would tend to set up Riedel shearing in the rock mass between (see Whittles, 1997B for the detailed discussion). In this case the Set X fault group would play the role of R2 Riedel Shears, Set B the role of R1









Figure B7: Low Altitude Air Photo Study Area (LAP)



Figure B8: Air Photo Geology (HAP)

Shears. These faults are quite large for Riedel shears, but are oriented in almost the right directions. If this is correct, the whole area becomes interesting as an exploration target, not just the presently located mineralization of the Macktush prospect.

B4: AIR PHOTO GEOLOGY OF THE SYMC PROPERTY

A detailed examination of the geology of the SYMC area was undertaken using the air photos, rose diagram plots of the lineaments, previous geological report, previous assessment reports, air magnetic map information, and ground examination (Whittles, 1997b). The result are given in Figure B8.

The surface exposure of the intrusive granodiorite is shown as rock type 9, and is mainly limited on the ground to the zones shown; however, outcrops of this rock are shown in the zone currently considered to be Karmutsen volcanic rock (5). This zone is labeled as 5/9 to show that an analysis of the air photo lineaments, the air magnetic map, and the outcrops of intrusive rock, all indicate that the intrusive is only shallowly covered by the volcanics and so extends well to the west.

A group of sedimentary rocks are found to the north (6, 8 and 10); these are discussed in the full report, but are not important in this Appendix.

B5: RECOMMENDATIONS

On the basis of structure, the type of mineralization already discovered at the Macktush Prospect should be looked for over much of the area shown on Figure B13; that is, AP2 Study Area of Figure B1. None of the X or B lineaments should be ignored. Figure B7 shows 5 Exploration Zones of different priority and different recommended approaches.

Exploration Zone 1 (Macktush Prospect)

This zone has been examined the most, although primarily from the drilling and excavation aspects. This report shows that it is just part of an extensive structure, representing perhaps 1/10 of the similarily structured rock, of even the smaller area of covered by the 1:17,900 air photos (AP2).

It is recommended that a 100m x 100m grid be established over this zone, and soil geochemical surveys be conducted, using multi-element geochemical analysis. Smaller grid zones should be set up, and surveyed, wherever anomalous values are encountered.

Along each of the lineament shown of Figure B15, a "ladder" grid should also be sampled. This would be done by surveying along each lineament, and running short 60m lines, with 10m stations, at right angles to the length of the lineaments. Care must be taken to soil sample, and avoid silt samples, at this stage.

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It may be found that when the overlying Karmutsen volcanics are encountered, they may mask any underlying mineralization. If this appears to be the case, and if known mineralized faults are seen to disappear under the volcanic cover, short diamond core drilling should make it possible to follow the mineralization. Geophysical methods - magnetometer or VLF-EM - might be used to follow the buried lineaments, but would be ambiguous as to the mineralization content.

Exploration Zone 2

This is a zone of strong fracturing in the X direction, with some B direction faults. It appears to structurally similar to Exploration Zone 1, and should be explored in the same manner.

Exploration Zones 3, 4, and 5

These zones should be explored, in order of their priority, in the following manner.

First a silt geochemical survey should be conducted along any mineralized lineaments found in Exploration Zones 1 and 2, to establish the expected levels of anomalous values. The lineaments in the Zones 3, 4, and 5 would be then silt surveyed in the same manner and compared.

Those lineaments which showed promise would then be soil sampled using the "ladder" grid method discussed above. Square grids might then be used to localize anomalies, followed up by excavation, and drilling.

Other Exploration Zones

The area just to the west of Exploration Zones 1 and 4 appears to be very interesting on the basis of preliminary air photo observations. It is one area were further detailed air photo interpretation is warranted, appearing to be well fractured, and containing extensions of the linear features that are the sites of the gold bearing mineralization on the Macktush Prospect (the Fred, etc., veins).

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APPENDIX C

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1996 ASSAY LOGS OF SURFACE SAMPLING PROGRAMME

Fred Vein assay results

Location	Tag#	Width	Au oz/ton	Ag oz/ton	Co	pper %
M100	100101	0.60m	0.324		1.67	1.026
M100 +50'	100102	0.60m	0.374		1.29	0.845
M100	100453	1.85m	0.553		2.69	1.8
M100 Gouge Zone	100464	0.25m	0.022		0.17	1.296
Main vein	100465	1.00m	0.423		1.76	0.724
vein	100466	1.00m	0.36	;	1.38	1.209
vein with Vugs	100467	1.50m	0.567		2.36	1.616
M150+ 150'	100468	1.25m	0.175		0.69	1.786
Gouge zone	100469	0.20m	0.002		0.04	0.012
Gouge at Hanging wa	100470	0.20m	0.004		0.04	0.012
Vein M100+200'	100471	0.75m	0.621		2.17	0.0861
Gouge Zone	100472	0.20m	0.058		0.18	0.092
Gouge at Hanging wa	100473	0.25m	0.146		0.06	0.008
At M160 Road	100006	2.10m	0.399		1.48	0.53
M160 +150'	100007	2.00m	0.306		1.26	1.19
At M160	100008	0.30m	0.074		0.36	0.602
At M160	100009	3.00m	0.19		0.58	0.431
M160 +200'	100010	2.85 m	0.473		2.06	0.545
M160 + 250'	100011	2.05m	0.372		1.85	1.117
M160 +375'	100012	3.0m	0.398		1.82	0.876
Gouge Zone	100013	0.25m	0.024	•.	0.27	1.5
M180	100014	3.0m	0.153	·	0.44	0.595
M180 + 100'	100015	0.10m	0.238		0.54	0.646

M180 +125'	100016 1.95m	0.836	3.47	0.608	
M180 gossan & cap	100017 1.75m	0.098	0.61	0.232	
M150 in wall	100018 2.0m	0.054	0.42	0.044	
Rt of sample018	100019 2.25m	0.119	1.02	0.101	
M180 +350' cap	100020 2.25m	0.076	1.43	0.491	
M180 +400' cap	100021 2.25m	0.078	0.72	0.179	
M180 +450' Fresh rocl	100022 2.15m	2.02	0.08	0.079	
M180+450 Cap	100023 2.25m	0.134	1.02	0.253	
M180 +450 Gouge zor	100024 0.10m	0.052	0.23	0.819	
M180 +500' cap	100025 1.95m	0.102	0.76	0.074	

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Assay Results from David Vein structures

Location	Tag #	Width	Au oz/ton	Ag oz/ton	Copper %
		•			
M100 Road Area #1	100103	1m	0.092	0.27	0.067
#2	100104	0.60m	0.164	0.64	0.694
#3	100105	0.95m	0.081	0.5	1.108
#4	100106	1.00m	0. 6 8	0.48	1.205
#5	62508	0.85m	0. 4 51	1.96	1.309
#6	62509	1.25m	0.504	2.2	0.738
#7	62510	1.15m	0.7 8 6	2.88	0.957
#8	62512	1.18m	0. 6 06	2.18	1.249
#9	100454	1.15m	0.372	2	1.503
		÷			
	-				
Trench across vein	100455	1.35m	0.556	2.39	0.708
Parallel vein structure	100456	1.25m	0.305	1.19	0.971
Parallel vein trench	100457	1.10m	0.22	1.001	0.436
Trench	100458	0.60m	0.178	1.91	0.438
Trench	100459	1.25m	0.104	0.9	0.093
Trench	100460	1.85m	0.096	1.86	0.717
	•				. <u>.</u>
Trench along Strike	100474	1.50m	0.612	2.25	1.5
Gouge Zone	100475	0.20m	0.175	0.08	0.124
Main Vein	100476	1.25m	0.387	1.63	1.793

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Trench bottom	100477 1.35m	0.332	1.01	0.383
Trench	100478 0.90m	0.666	2.63	2.045
Trench Gouge zone	100479 0.28m	0.106	0.3	0.186
Gouge Hanging wall	100480 0.25m	0.082	0.3	0.23

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Beach road Assay Results

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mple	•	Sample #	Width	Au oz.ton	Ag oz/ton		Copper %
	1	100128	1.5 M	0.001		0.12	0.201
	2	100129	1.5M	0.001		0.01	0.029
	3	100130	1.5M	0.001		0.04	0.056
	4	100131	1.5M	0.001		0.003	0.01
	5	100132	1.5M	0.001		0.01	0.017
	6	100133	1.5M	0.001		0.01	0.005
	7	100134	1.5M	0.001	:	0.01	0.024
	8	100135	1.5M	0.001		0.01	0.001
	9	100135	1.5M	0.001		0.01	0.001
	10	100136	1.5M	0.001		0.03	0.001
	11	100137	1.5M	0.001		0.02	0.001
	12	100138	1.5M	0.001		0.01	0.003

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Location	Assay #	Au oz/ton	Ag oz/ton	Copper %	
`Grab Sample	100461	0.003	0.26		2.047
Grab Sample	100462	0.001	0.3		2.743
Grab Sample	100463	0.001	0.18		1.602

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All Assays From 3000 Creek Area

MC Claim Assay Results

Location/sample #Assay Tag #Width		Au oz/ton Ag oz/ton	Copper %	
405 Logging Road	100351 0.35M	0.176	5.96	10.91
405 Logging Road	100352 0.60m	0.2	7.99	19.913
405 Logging raod	100353 0.65m	0.145	4.46	9.203
405 Logging Road	100354 0.80m	0.153	2.03	7.926
405 Logging Road	100355 0.30m	0.175	7.91	15.624
405 Logging Road	100356 0.60m	0.167	2.89	7.791
403 Logging road	100357 1.00m	0.198	2.35	9.544
403 Logging roa	100358 0.30m	0.147	3.13	9.49
403 Logging road	100451 0.60m	0.001	0.01	0.047
403 Logging road	100452 0.35m	0.001	0.01	0.021

405 Loging Road

Side Hill Exposur	Tag # V	Vidth Au	oz/ton	Ag oz/ton	Co	pper %
1	100481 0.).60m	0.12	2	4.86	17.846
2	100482 0).75m	0.213	3	4.29	13.595
3	100483 0).35m	0.183	3	3.7	15.205
4	100484 0.).50m	0.221	I	3.68	13.202
5	100485 0.).65m	0.338	}	4.65	11.372
6	100486 0).80m	0.169)	3.85	15.195
7	100487 0.). 20 m	0.246	5	2.56	13.461
8	100488 0.).45m	0.203	3	3.4	12.532
9	1 0048 9 0.).65m	0.261		3.48	11.38

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10	100490 0.35m	0.224	3.82	14.452			
Mc 4 Claim Grouping							
Cous Creek GrabT	ag# Width	Auoz/ton Ag oz/ton	C	opper %			
Side hill Trench	100491 0.95m	0.1	0.25	4.98			
Side Hill Trench	100492 1.25m	0.008	0.19	5.093			
Creek and Trenct	100493 0.65m	0.011	0.14	5.96			
Shear zone Grab	100494 0.50m	0.009	0.18	4.92			
side Hill Trench	100495 1.05m	0.003	0.19	0.003			

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Trench bottom	100477 1.35m	0.332	1.01	0.383
Trench	100478 0.90m	0.666	2.63	2.045
Trench Gouge zone	100479 0.28m	0.106	0.3	0.186
Gouge Hanging wall	100480 0.25m	0.082	0.3	0.23

•

Location	Assay #	Au oz/ton	Ag oz/ton	Copper %	
Grab Sample	100461	0.003	0.26		2.047
Grab Sample	100462	0.001	0.3		2.743
Grab Sample	100463	0.001	0.18		1.602

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All Assays From 3000 Creek Area
10	100490 0.35m	0.224	3.82	14.452

Mc 4 Claim Grouping

Cous Creek GrabTa	g #	Width	Auoz/ton	Ag oz/ton	Cop	Copper %		
Side hill Trench	100491	0.95m	0.1		0.25	4.98		
Side Hill Trench	100492	1.25m	0.008		0.19	5.093		
Creek and Trenct	100493	0.65m	0.011		0.14	5.96		
Shear zone Grab	100494	0.50m	0.009		0.18	4.92		
side Hill Trench	100495	1.05m	0.003		0.19	0.003		

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Figure B3: Rose Diagram of All Air Photo Lineaments

Sample Parameters

Number of Data Points in Set	293
Number of Data Points Counted	293
Type of Data	Lines (Trend)
Range of Plunge Angles	0° - 90°
Class interval	10°
Class Alignment	Start at 0°N
Kurtosis, k, of Smoothing Function	206
Half-width of Smoothing Function	±4.7°
Weighted Calculation	

Frequency Statistics

Mode (Peak)	13.4%
Range of Mode	0° - 10°
Smooth Peak	10.4%
Azimuth of Smooth Peak	5.0°
Expected Value, E	5.6%
Standard Deviation	2.0%
95% Confidence Levels	<1.6% & >9.5%
	• • · · · · ·

The distribution has a preferred trend.

Resultant Vector

Magnitude, R	23.3%
Azimuth	154.2°
Critical Value of R	10.3%
The distribution has a preferred trend.	
Von Mises Parameter, K	_ 0.479
Standard Error of Mean	±10.0°
95% Confidence Interval	±19.6°

B1. INTRODUCTION

This Appendix is a much abbreviated version of an air photo interpretation report (Whittles, 1997b) that is available from SYMC Resources Ltd (called the "Main SYMC Report"). There is also a "SYMC Summary Report" (Whittles, 1997a) that was prepared for SYMC which is more comprehensive than this Appendix, but which itself is only a summary of the findings of the Main SYMC Report. The purpose of this Appendix is to provide a brief outline of main findings of the air photo study, without the detailed analysis and supporting evidence provided in the Main SYMC Report, or in the SYMC Summary Report.

The location of the SYMC Claim Group, claim ownership, etc. is discussed in the main body of this report (Davey and Carter, 1997), and the areas covered by the air photo studies are outlined on Figure B1. Two separate groups of air photos were used: AP1 Study Area, using high altitude air photos (1:80,000); and, AP2 Study Area (1:17,900). Detailed information (air photo numbers, etc.) is available in the Main SYMC Report.

The air photos were examined using mirror stereoviewers, the lineaments transferred by a GTCO digitizer to a TurboCAD computer diagram, and the results analyzed using the Rose diagrams produced by the SpheriStat computer program. Whittles (1997b) gives a complete discussion of air photo techniques, the various file formats produced, and the limitations particularly of the SpheriStat program (a new product).

The SpheriStat program allows a rapid testing of the lineaments, giving a good level of confidence that identification of the lineaments as: faults of various kinds, joints, or just random geomorphologically produced features, is valid. The identification of the lineaments was also tested against the findings of a qualitative analysis of the air magnetic map of the region, a detailed study of the geological reports of the area (Muller and Carson, 1969; Muller, 1977; Southerland Brown et al, 1986; Massey, 1995), as well as against a background of the plate tectonics of Vancouver Island that are known from the lithoprobe studies (Hyndman et al, 1990).

B2. STRUCTURAL GEOLOGICAL SETTING OF THE SYMC CLAIM AREA

A summary of the regional geology and mineralization, is given earlier in this report (Davey and Carter, 1997). The geological map of Massey (1995), being the most recent and complete study of the Alberni area, was analyzed to provide the geological controls for the air photo interpretation. All the faults on the Massey map were measured and plotted on Rose diagrams. Several distinctive trends were observed, attributable to thrust- composite and strike slip faults. These were compared to the lineaments of the air photo analysis, and used to interpret the structural geology of the SYMC property, and its relationship to the gold mineralization found on that property. Refer to the SYMC Summary Report for an outline of these results or to the Main SYMC Report for the details.

Regional Thrust-Composite Faults

Certain of the Massey faults are identified as thrust faults. There is some disagreement amongst geologists as to the exact nature of some of these. Although the concept of thrust faults is very strongly supported by the extensive tectonic studies, most recent published regional geology, and is a concept the present writer accepts, the faults are probably listric, may become almost vertical at the surface in certain locations on Vancouver Island, and in addition to vertical movement may have extensive strike slip movements. The counter motions of North American and Juan De Fuca tectonic plates make both thrust faulting and compressive strike slip faulting most likely. Consequently, the present writer prefers to label these as thrust-composite faults

This type of fault is essentially restricted to a band of directions. The mean azimuth is 145 (or 325) degrees. The thrust-composite faults are inferred to be restricted mainly to the 303 to 343 directional zone. There is a fine structure evident, and the possible significant of this is discussed in the full report (Whittles, 1997a). The presence of this fine structure does not alter the conclusions presented in this Appendix.

Other Regional Faults

Three other prominent fault directions were found. The possible significance of these features will be discussed in the following section.

B3. AIR PHOTO INTERPRETATION OF THE SYMC PROPERTY

The air photo study covers an area perhaps 1/10 of the size of the Massey map area, was conducted entirely independently of the Massey map, and used air photo lineaments rather than ground observations; yet there are many common features on both sets of maps. This is what one would expect if both approaches were examining similar underlying structures. These structural patterns are not just random (the "shattered" glass analogy); consequently, it is important to try to analyze them, provide an exploration model that uses this analysis, and apply this model to expand the potentials of the property.

Whittles (1997b) discusses the differences of "shattered glass" or random patterns and those found in the air photo study. Random values of direction and length were generated from a random number table, and tested. The Rose diagram plot can recognize a random number (or uniform) plot even with small numbers of lineaments.

The following figures outline the findings of the these air photo studies. The full report (Whittles, 1997b) should be referred to for the detailed analysis.

Figure B2: Map Plot of All the High Altitude Air Photo (HAP) Lineaments

This is a TurboCAD map showing all the lineaments of AP1 Study Area (Figure B1). It is easy to consider that this is just a random distribution of lines, but the following analysis shows that once we filter the "noise" from the map, a definite underlying structure emerges.

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852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

ASSAY CERTIFICATE



Data F FA \$

SYMC (David Holding Ltd) File # 96-6490 3009 Kingsway, Port Alberni BC V9Y 1X7

I					-					. :						
SAMPLE#	MO	CU	PB	Zn	AG	NI	co	MN	FE	AS	U	TH	CD	SB	BI	Au
	1 %	7.	%	76	oz/t	%	76	%	%	76	%	%	%	76	7.	. oz/t
¥ A 100481	4.001	17.846	<.01	. 16	4.88	.066	.047	.02	31.15	.04	<.01	<.01	<.01	<.01	.02	.210
- ⊀ A 100482	4.001	13.595	<.01	. 14	4.29	.078	.064	.02	27.05	.05	<.01	<.01	<.01	<.01	.02	.213
A 100483	4.001	15.205	<.01	.16	3.70	.065	.061	.02	29.74	.05	<.01	<.01	<.01	<.01	.02	.183
🔓 A 100484	4.001	13.202	<.01	.16	3.68	.060	.038	.02	29.36	.03	<.01	<.01	<.01	<.01	.02	.221
A 100485	1.001	11.372	<.01	.15	4.65	.092	.030	.01	29.50	.04	<.01	<.01	<.01	<.01	.02	.338
4 -																
▲ A 100486	4.001	15,195	.01	. 19	3.85	.060	.071	.02	30.37	.05	<.01	<.01	<.01	<.01	.02	. 169 .
A 100487	1.001	13.461	<.01	.16	3.56	080	.040	.01	29.77	.04	<.01	<.01	<.01	<.01	.01	.246 1
► A 100488	1.001	12.532	<.01	.09	3.40	.067	.035	.02	33.27	.03	<.01	<.01	<.01	<.01	.02	203
A 100489	1 001	11 380	< 01	15	3 48	080	038	01	26.45	.03	< 01	< 01	<.01	< 01	.02	. 261
# A 100490	1 001	14 552	< 01	15	3 82	059	030	01	31 62	02	< 01	< 01	< 01	< 01	02	224
ALA 100470	1.001	14.336			3.02	.057	.050		51.0L							
C DE A 100/00	1 001	1/ /30	< 01	15	7 90	050	070	01	71 52	03	< 01	< 01	< 01	< 01	02	222
A 100490	1.001	14.437	< 01	. 15	3.00	.007	001	- 01	51.52	.05	< 01	- 01	< 01	< 01	.02	010
A 100491	1.004	4.9/0	1.01	.01	.25	.002	001	< 01	5.47	.01	.01	< 01	< 01	< 01	.01	.010
A 100492	1.009	5.093	<.U1	<.UT	. 19	.002	.001	<.U1	2.21	.01	<.UI	<.U1	1.01		.01	.008
A 100493	1.003	5.960	<.01	<.01	. 24	.001<	.001	<.01	0.28	.01	<.01	<.01	<.01	<.01	.01	.011
A 100494	.004	4.962	<.01	<.01	. 18	.002<	.001	.01	5.50	.01	<.01	<.01	<.01	<.01	.01	.009
A 100495	.001	6.325	<.01	<.01	. 19	.002<	.001	.01	5.75	<.01	<.01	<.01	<.01	<.01	.01	.003
STANDARD R-1/AU-1	.094	.835	1.30	2.38	2.92	.026	.026	.08	6.50	.92	.01	.01	.05	.16	.03	.098

1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP. AU - 10 GM REGULAR ASSAY. - SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

ACME ANALYTICAL LABORATORIES LTD. 852 E.	HASTINGS ST. VANCO	UVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
	ASSAY CERTIF	
SYMC (Dav	id Holding Ltd) 3009 Kingsway, Port Alb	File # 96-6490 erni BC V9Y 1X7
	SAMPLE#	CU %
	A 100481 A 100482 A 100483 A 100484 A 100485	17.635 13.919 15.729 13.255 11.487
	A 100486 A 100487 A 100488 A 100489 A 100490	15.231 13.419 12.596 11.694 14.622
	RE A 100490 STANDARD R-1	14.677 .845
DATE RECEIVED: DEC 11 1996 DATE REPORT MAILED	interest in the second se	EREJECT REFUNS.
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Data____FA

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 ASSAY CERTIFICATE



		Box 473,	4C PRC 1200 Left	<u>)JECT</u> er Road,	MACTU Erringto	<u>ISH C'R</u> m BC VOR	<u>EEK</u> 1vo s	File Submitted	# 96 by: Dav	-5598 ey Holdin	ngs Ltd.					TT
SAMPLE#	Mo	Cu	Pb	Zn	Ag oz/t	Ni	Co	Mn %	Fe *	As %	U %	Th १	Cd %	Sb %	Bi	Au oz/t
A 100453 A 100454 A 100455 A 100456 A 100457	.003 .006 .002 .007 .003	1.800 1.503 .708 .971 .472	<.01 <.01 <.01 <.01 <.01	<.01 .01 <.01 <.01 <.01 <.01	2.69. 2.00< 2.39 1.19 1.00<	.002< .001 .002 .002 .002	.001 .001 .001 .001 .001	<.01 <.01 .02 <.01 .01	5.35 4.36 4.89 3.92 3.52	<.01 .05 <.01 <.01 .03	<.01 <.01 <.01 <.01 <.01	<.01< <.01< <.01< <.01< <.01<	.001 .001 .001 .001 .001	.002 .006 .001 .001 .042	<.01 <.01 <.01 <.01 <.01	.553 .372 .556 .305 .220
A 100458 A 100459 RE A 100459 A 100460 A 100461	.001 .001 .001 .001 .001	.438 .093 .093 .717 2.047	<.01 <.01 <.01 <.01 <.01	.04 .01 .01 .05 <.01	1.91< .90< .89< 1.86 .26	.001 .001 .001 .001 .001<	.001 .001 .001 .001	.01 .01 <.01 <.01 <.01	3.69 3.31 3.33 3.71 4.42	.06 .01 .01 .09 <.01	<.01 <.01 <.01 <.01 <.01	<.01< <.01< <.01< <.01< <.01<	.001 .001 .001 .001 .001	.175 .040 .040 .223 .001	<.01 <.01 <.01 <.01 <.01	.178 .104 .100 .096 .003
A 100462 A 100463 STANDARD R-1/AU-1	.001 .001 .089	2.743 1.602 .838	<.01 <.01 1.30	<.01 <.01 2.36	.30 .18 2.88	.001< .001< .024	.001 .001 .027	<.01 .01 .08	4.69 3.94 6.55	<.01 <.01 1.00	<.01 <.01 .01	<.01< <.01< .01	.001 .001 .044	.001 <.001 .158	<.01 <.01 .03	.002 .001 .102

1 GM SAMPLE LEACHED IN 50 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

AU - 10 GM REGULAR ASSAY.

- SAMPLE TYPE: ROCK

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 29 1996 DATE REPORT MAILED: Nov 8/46

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHO

PHONE (604) 253-3158 FAX (604) 253-1716

ASSAY CERTIFICATE

SYMC (David Holding Ltd) File # 96-6813



1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP. AU - 10 GM REGULAR ASSAY. - SAMPLE TYPE: ROCK

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: DEC 17 1996 DATE REPORT MAILED: 1/ec 24/96

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852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

					ASSAY	TFIC	ATE				Å					
11	<u>SYM</u>	C (Dav	id Ho	lding 30	<u>Ltd)</u> 09 Kingswa	PROJE ay, Port	ECT MZ Alberni	ACTUSH BC V9Y 1X	Fi] 7	Le # 9	96-597	75				TT
SAMPLE#	Mo %	Cu	Pb	Zn %	Ag oz/t	Ni	Co %	Mn %	Fe %	As %	U %	Th %	Cd	Sb %	Bi	Au oz/t
A 100464 A 100465 A 100466 A 100467 A 100468	.001 .001 .006 .010 .001	1.296 .724 1.209 1.616 1.786	<.01 <.01 <.01 <.01 <.01	<.01 .01 .01 .01 .05	.17 1.76 1.38 2.36 .69	.001< .001 .002 .001 .001	<pre>c.001 .001 .001 .001 .001 .001 .001</pre>	<.01 .02 .01 .01 .01	1.96 3.44 3.25 4.10 3.26	.02 <.01 <.01 <.01 <.01 .08	<.01 <.01 <.01 <.01 <.01 <.01	<.01< <.01< <.01< <.01< <.01 <.01<	.001 .001< .001 .001 .001	.016 .001 .003 .010 .216	<.01 <.01 <.01 <.01 <.01	.022 .423 .360 .567 .175
A 100469 A 100470 A 100471 A 100472 A 100473	.001 .002 .009 .008 .010	.012 .012 .861 .092 .008	<.01 <.01 <.01 <.01 <.01	.01 .01 .01 .01 <.01	.04 .04 2.17 .18 .06<	.001 .001 .001 .001 .001	.001 .001 .001 .001 .001	.10 .06 .01 .03 .01	3.67 2.60 5.46 2.48 3.11	<.01 <.01 <.01 .01 <.01	<.01 <.01 <.01 <.01 <.01	<.01< <.01< <.01 <.01 <.01< <.01<	.001 .001 .001 .001 .001	.003 .002 .007 .008 .001	<.01 <.01 <.01 <.01 <.01	.002 .004 .621 .058 .146
A 100474 A 100475 A 100476 RE`A 100476 A 100477	.006 .013 .004 .004 .003	1.502 .124 1.793 1.784 .383	<.01 <.01 <.01 <.01 <.01	.01 <.01 <.01 .01 .01	2.25 .08< 1.63. 1.68. 1.01	.001 .001 .001 .001 .001	.001 .001 .001 .001 .001	.01 .01 <.01 <.01 <.01	4.37 1.51 4.23 4.22 3.59	<.01 <.01 <.01 <.01 <.01 .03	<.01 <.01 <.01 <.01 <.01	<.01< <.01< <.01< <.01< <.01<	.001 .001 .001 .001 .001	.003 .001 .001 .002 .040	<.01 <.01 <.01 <.01 <.01	.612. .175. .387. .378 .332.
A 100478 A 100479 A 100480 STANDARD R-1/AU-1	.008 .010 .006 .088	2.045 .186 .230 .850	<.01 <.01 <.01 1.38	<.01 .01 .01 2.30	2.63 .30 .30< 2.71	.002< .001 .001 .024	<pre><.001 .001 .001 .025</pre>	<.01 .02 .03 .08	4.91 2.93 1.91 6.53	<.01 .02 <.01 .94	<.01 <.01 <.01 .01	<.01< <.01< <.01< <.01< .01	.001 .001 .001 .045	.004 .015 .001 .159	<.01 <.01 <.01 .03	.666 .106 .082 .100

1 GM SAMPLE LEACHED IN 50 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP. AU - 10 GM REGULAR ASSAY. - SAMPLE TYPE: ROCK

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 ASSAY CERTIFICATE SYMC (David Holding Ltd) PROJECT MACTUSH File # 96-6264 3009 Kingsway, Port Alberni BC V9Y 1X7 SAMPLE# MO CU PB Zn AG CO MN FE TH CD SB BI Au N I AS U % % % % % % % oz/t % % % % % % % oz/t E 100111 .021 <.01 .01 .01 .006 .005 .15 10.33 <.01 <.01 <.01 <.01 <.01 <.01 <.01 .003 .001 E 100112 .001 E 100113 .001 E 100114 .001 E 100115 .001 E 100116 .001 .004 <.01 <.01 <.01 .007 .006 .05 13.65 <.01 <.01 <.01 <.01 <.01 <.01 <.01 .01 E 100117 .001 E 100118 .020 <.01 <.01 <.01 .004 .005 .07 8.73 <.01 <.01 <.01 <.01 <.01 <.01 <.01 .001 .001 E 100119 .001 .027 <.01 <.01 <.01 .005 .004 .09 8.48 <.01 <.01 <.01 <.01 <.01 <.01 <.01 .002 E 100120 .004 <.01 <.01 .01 .003 .009 .04 15.02 .01 <.01 <.01 <.01 <.01 <.01 <.01 .002 .002 E 100121 .001 .002 <.01 <.01 <.01 <.01 .001 .001 .04 2.57 <.01 <.01 <.01 <.01 <.01 <.01 <.01 .003 RE E 100121 .001 .003 <.01 <.01 <.01 <.01 .001 .001 .04 2.55 <.01 <.01 <.01 <.01 <.01 <.01 <.01 .002 E 100122 .009 <.01 <.01 <.01 .004 .002 .09 4.79 <.01 <.01 <.01 <.01 <.01 <.01 <.01 .001 .001 E 100123 .008 10.964 <.01 .26 5.16 .015 .050 .05 29.44 .14 <.01 <.01 <.01 <.01 .01 .01 .245 E 100124 .001 .976 <.01 .02 .42 .016 .024 .05 10.39 .03 <.01 <.01 <.01 <.01 <.01 .019 E 100125 .001 E 100126 .001 .050 <.01 .01 <.01 .009 .004 .07 8.10 <.01 <.01 <.01 <.01 <.01 <.01 <.01 .001 E 100127 .001 .024 <.01 <.01 <.01 .006 .005 .12 7.27 .01 <.01 <.01 <.01 <.01 <.01 <.01 .001 STANDARD R-1/AU-1 .090 .835 1.30 2.36 2.99 .026 .024 .09 6.48 .95 .01 .01 .05 .16 .03 .099

> 1.000 GM SAMPLE LEACHED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP. AU - 10 GM REGULAR ASSAY. - SAMPLE TYPE: ROCK

> > 196

SIGNED BY.

Data 1(FA

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE REPORT MAILED : Lecs

DATE RECEIVED:

NOV 28 1996

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716

AA		<u>SY</u> Box 473,	<u>MC PR</u> 1200 Lef	OJECT fer Road	ASSAY MACTU , Erringto	CERTIN SH CREN n BC VOR 1V	FICATE <u>EK</u> File 70 Submitted	# 96 1 by: Dav	-5598 ey Holding	js Ltd.					AA				
SAMPLE#	Mo	Cu	Pb	Zn	Ag oz/t	Ni	Co Mn	Fe %	As %	U %	Th %	Cd	Sb	Bi	Au oz/t				
A 100453 A 100454 A 100455 A 100456 A 100457	.003 .006 .002 .007 .003	1.800 1.503 .708 .971 .472	<.01 <.01 <.01 <.01 <.01	<.01 .01 <.01 <.01 <.01 <.01	2.69 2.00< 2.39 1.19 1.00<	.002<.0 .001.0 .002.0 .002.0	001 <.01 001 <.01 001 .02 001 <.01 001 .01	5.35 4.36 4.89 3.92 3.52	<.01 .05 <.01 <.01 .03	<.01 <.01 <.01 <.01 <.01 <.01	<.01< <.01< <.01< <.01< <.01< <.01<	.001 .001 .001 .001< .001<	.002 .006 .001 .001 .042	<.01 <.01 <.01 <.01 <.01 <.01	.553 .372 .556 .305 .220				
A 100458 A 100459 RE A 100459 A 100460 A 100461	.001 .001 .001 .001 .001	.438 .093 .093 .717 2.047	<.01 <.01 <.01 <.01 <.01	.04 .01 .01 .05 <.01	1.91< .90< .89< 1.86 .26	.001 .0 .001 .0 .001 .0 .001 .0 .001 .0	001 .01 001 .01 001 .01 001 <.01 001 <.01	3.69 3.31 3.33 3.71 4.42	.06 .01 .01 .09 <.01	<.01 <.01 <.01 <.01 <.01	<.01< <.01< <.01< <.01< <.01< <.01<	.001 .001 .001 .001 .001	.175 .040 .040 .223 .001	<.01 <.01 <.01 <.01 <.01 <.01	.178 .104 .100 .096 .003				
A 100462 A 100463 STANDARD R-1/AU-1	.001 .001 .089	2.743 1.602 .838	<.01 <.01 1.30	<.01 <.01 2.36	.30 .18 2.88	.001<.0 .001<.0 .024 .0	001 <.01 001 .01 027 .08	4.69 3.94 6.55	<.01 <.01 1.00	<.01 <.01 .01	<.01< <.01< .01	.001 .001< .044	.001 .001 .158	<.01 <.01 .03	.002 .001 .102				

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DATE RECEIVED: OCT 29 1996 DATE REPORT MAILED: Nov 8/96

. :

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inches



FIGURE 2 - PROPERTY LOCATION



inches

0

FIGURE 3 - REGIONAL GEOLOGY (After Muller and Carson, 1969 and Carter 1989)





inches



FIGURE 4B - SKY AND MC MINERAL CLAIMS



FIGURE 5 -SAMPLING AREAS - 1996 FIELD PROGRAM



FIGURE 6 - FRED, DAVID AND RED VEIN LOCATIONS



FIGURE 7 - SECTION LINE AND SAMPLE AREAS - FRED VEIN



FIGURE 8 - FRED VEIN SURFACE SAMPLING PROGRAM



FIGURE 9 -SECTION LINE & TEST PITS - DAVID & PARALLEL VEIN



FIGURE 10 - DAVID VEIN ASSAY RESULTS

inches





FIGURE 11 - DIAMOND DRILL HOLE PLAN - FRED VEIN



DDH 8-105.8m

ł

FIGURE 12 - DIAMOND DRILL CROSS SECTIONS (Looking N 60°E) FRED VEIN

Vein Intersection = % Cu, oz/ton Ag, oz/ton Au/length (metres) 0 10 25 50

METRES

DDH 3-41.1m

Lower Adit 600 m -

550m-

0.80,0.48,0.112/0.79

0.95,5.04,1.290/3.81

650m ·

600m-

0.03,0.05,0.290/1.25

FIGURE 13 - 1996 MAPPING & CHIP SAMPLING PROGRAM - BEACH ROAD INTRUSIVE

FIGURE 14 -

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:

MAC 1 SAMDI INC ADEA - ALONGSIDE RRANCH ADS LOGGING ROAD

FIGURE 15 - MC CLAIM SAMPLE RESULTS